

FIG. 1A

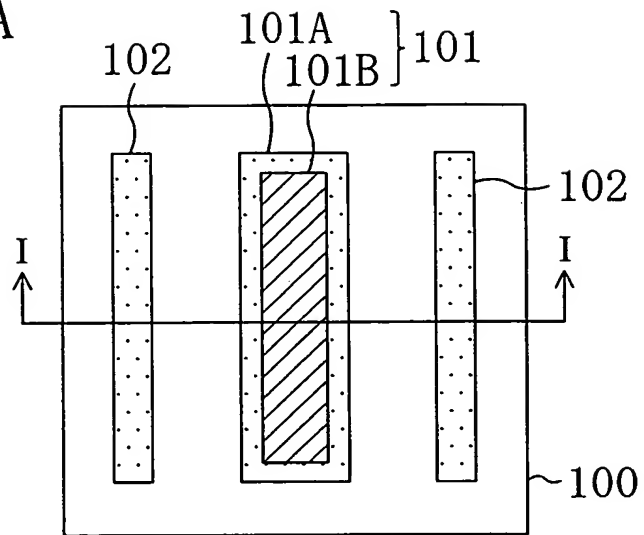


FIG. 1B

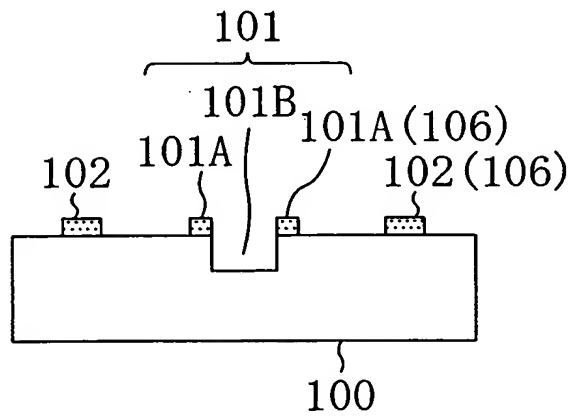


FIG. 1C

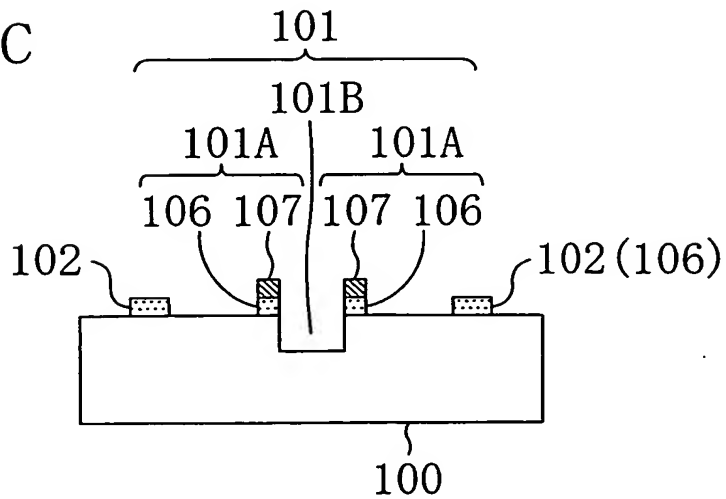


FIG. 2A

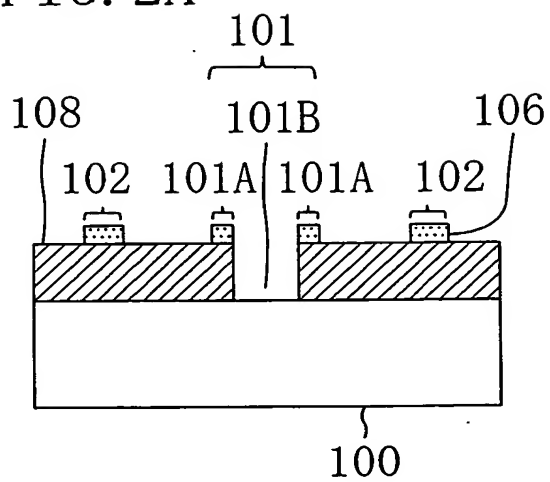


FIG. 2B

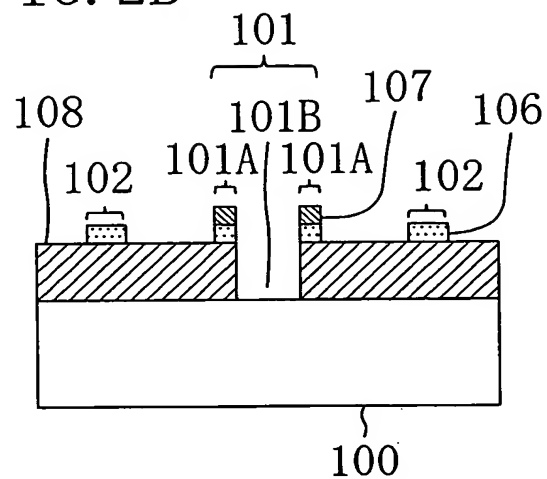


FIG. 2C

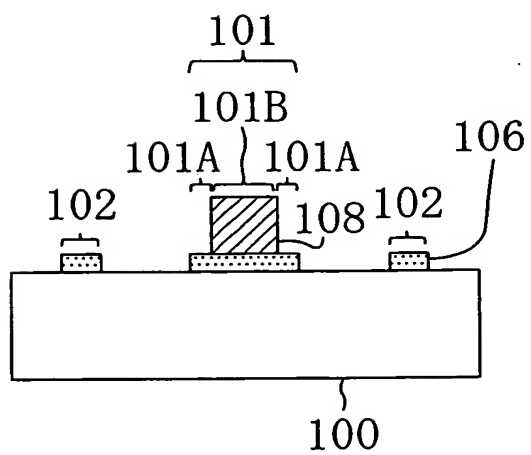


FIG. 2D

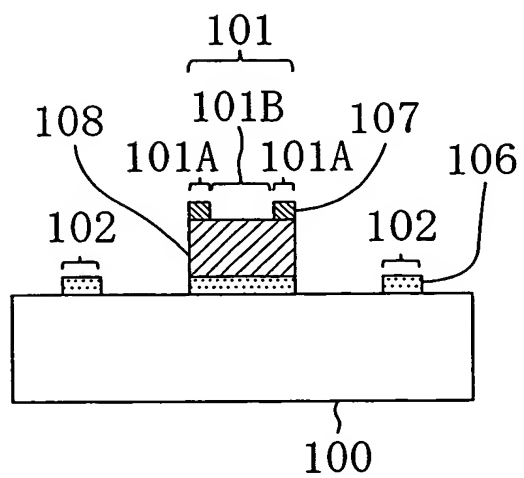


FIG. 3A

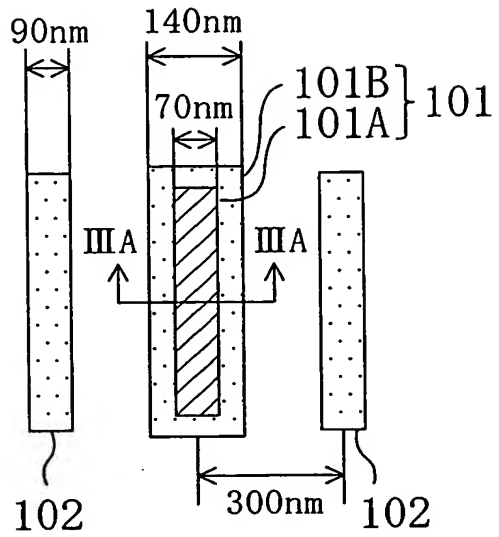


FIG. 3B

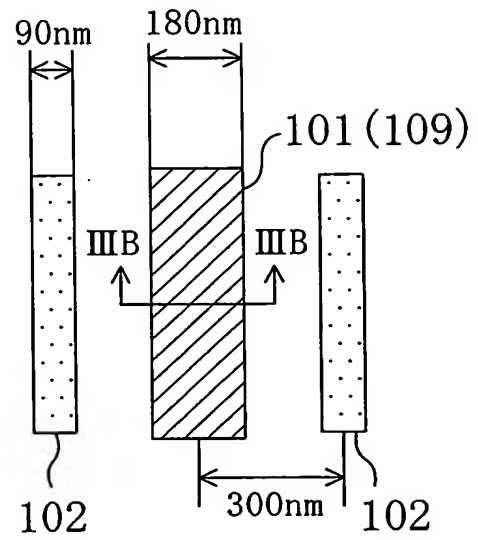


FIG. 3C

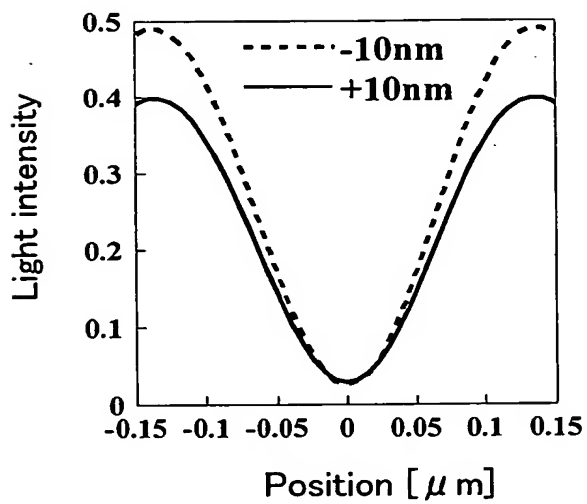


FIG. 3D

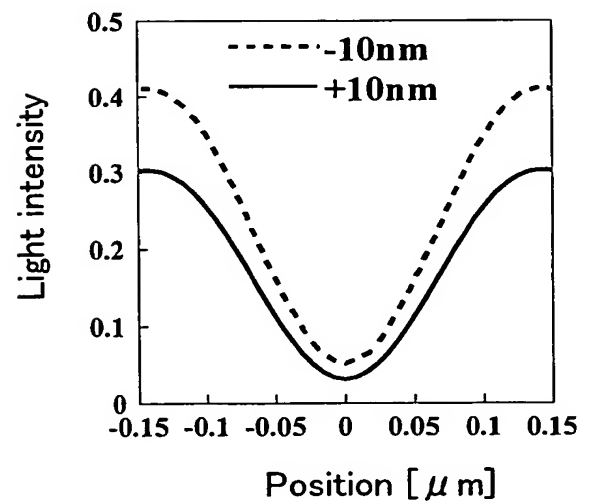


FIG. 4

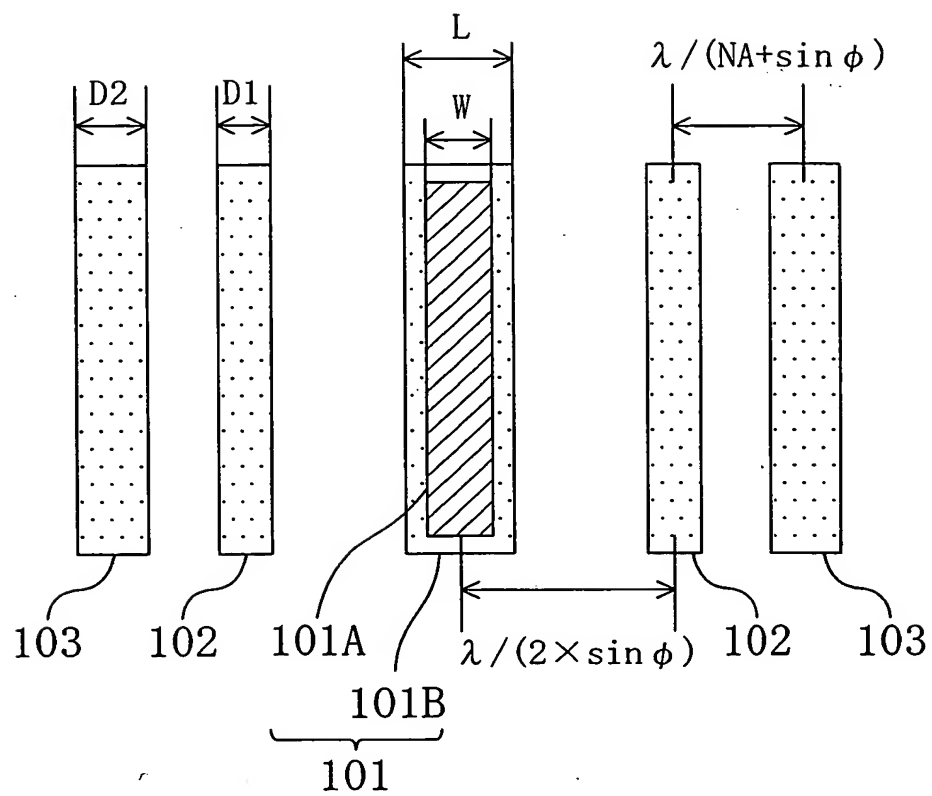


FIG. 5A

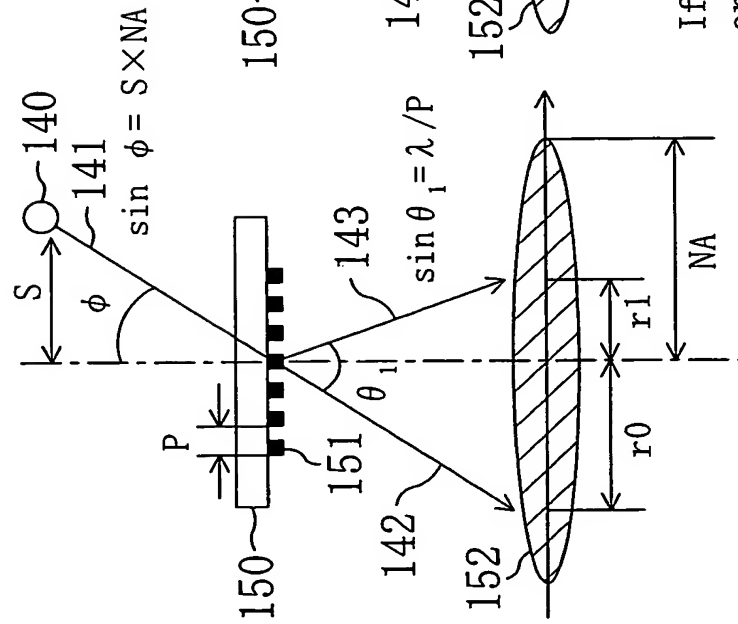
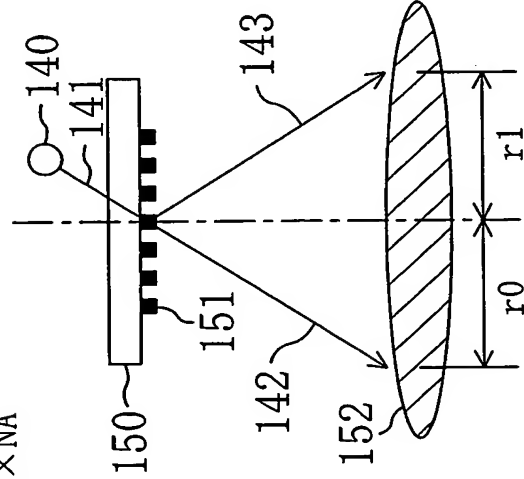
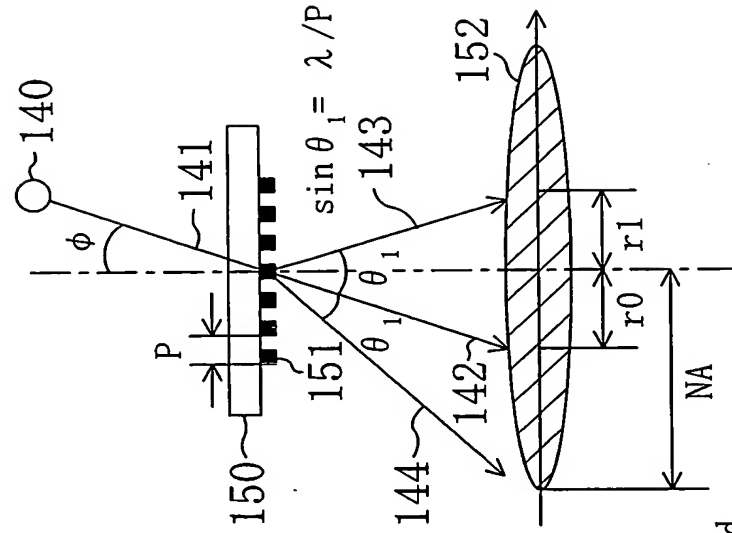


FIG. 5B



If  $r_0 = -r_1$ , focused 0th-order diffraction light and focused first-order diffraction light are in the identical phase even in a defocus state.

FIG. 5C



When both +first-order diffraction light and -first-order diffraction light pass through a mask, a good defocus state cannot be obtained.

FIG. 6A

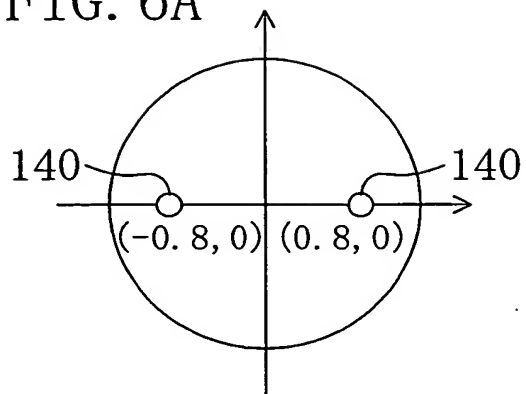


FIG. 6B

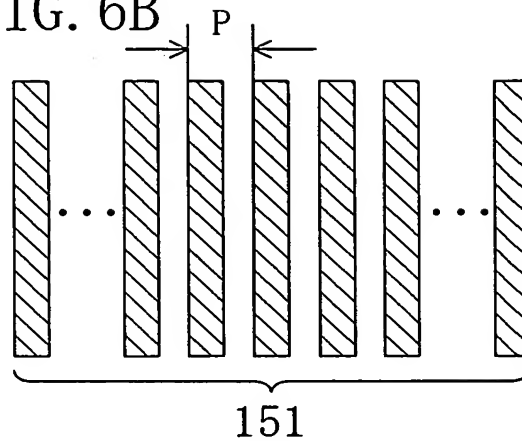


FIG. 6C

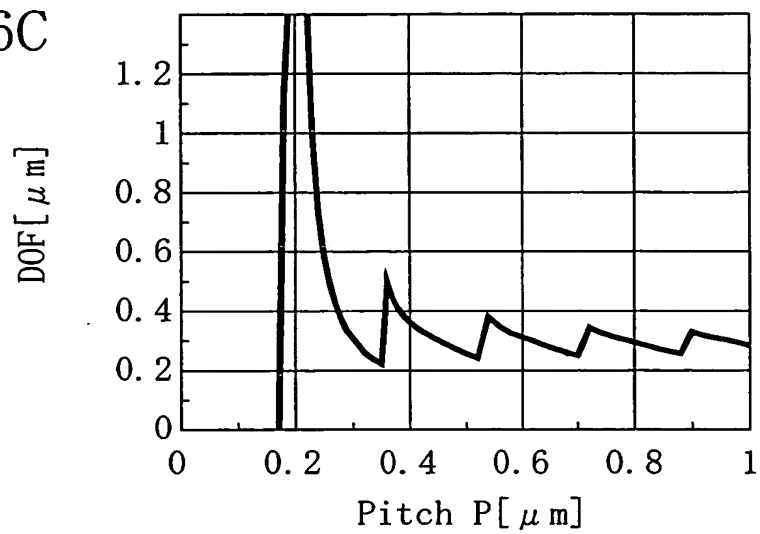


FIG. 6D

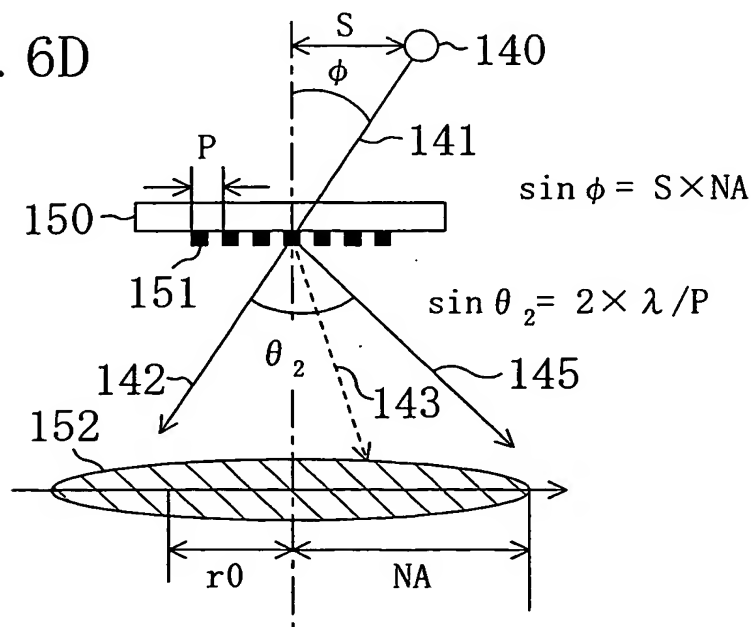


FIG. 7A

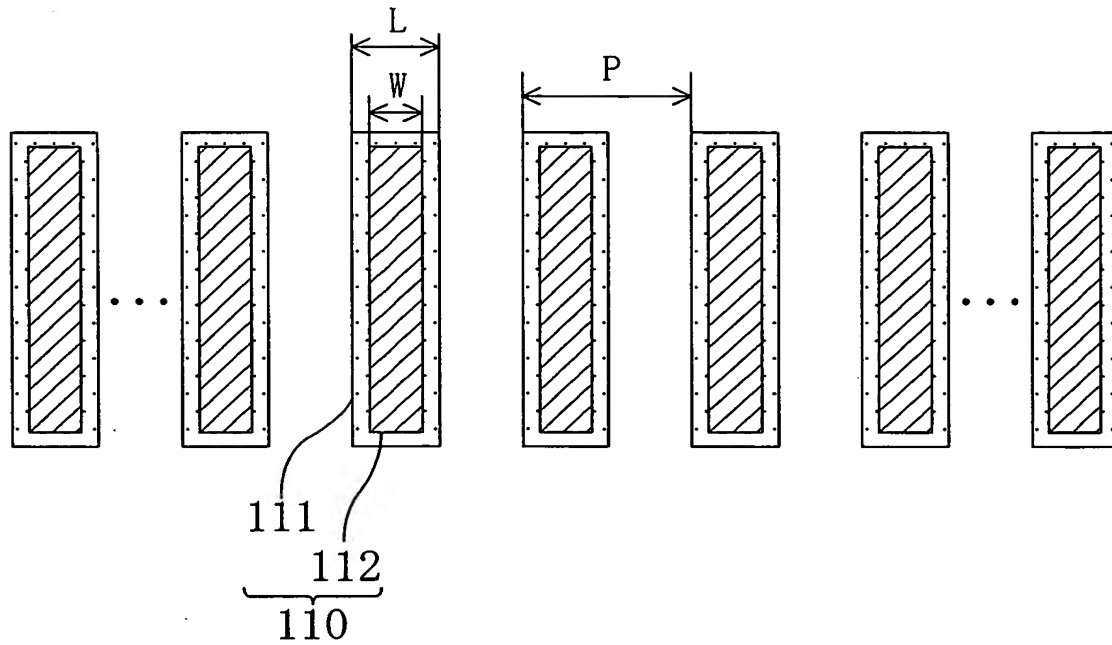


FIG. 7B

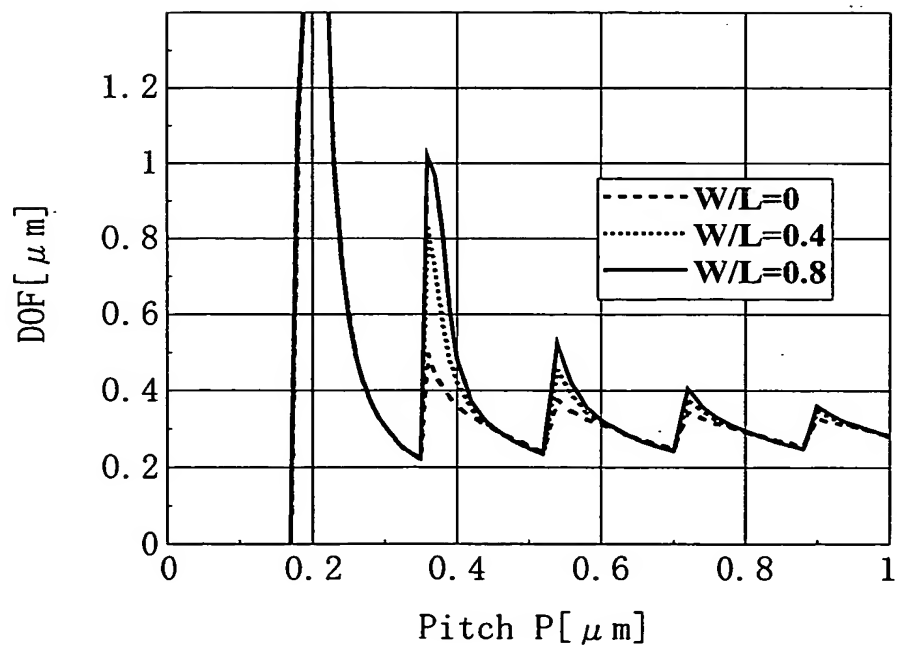


FIG. 8A

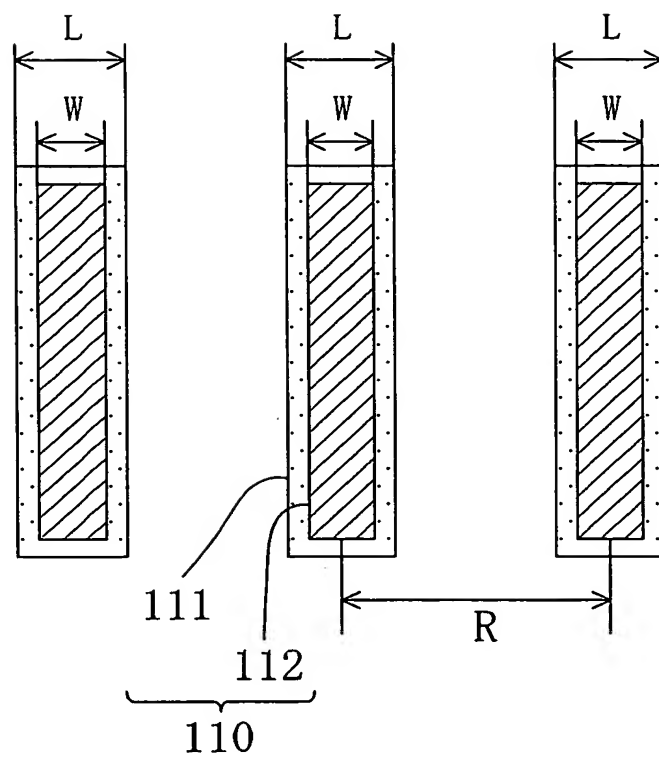


FIG. 8B

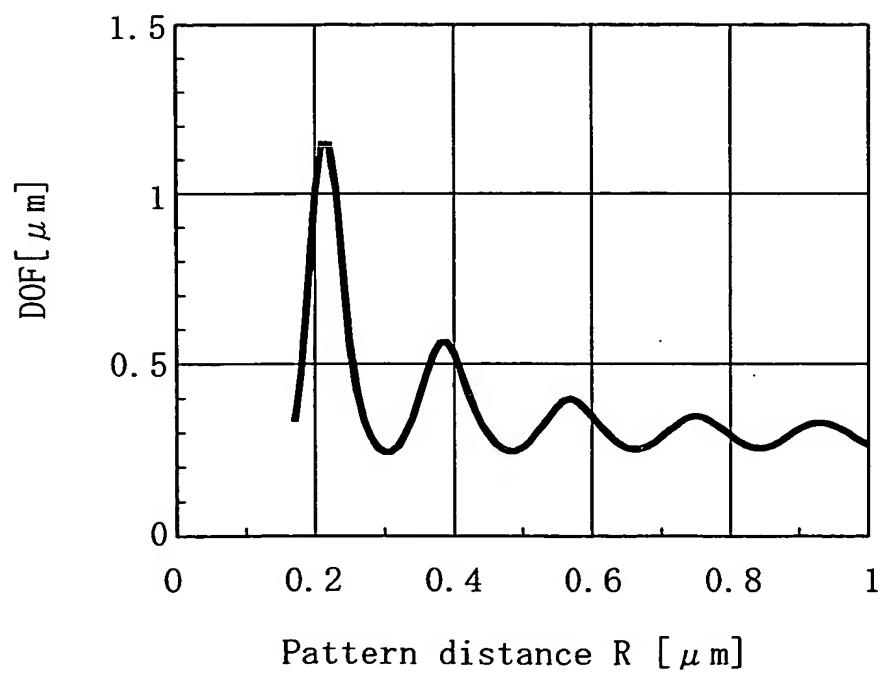




FIG. 9A

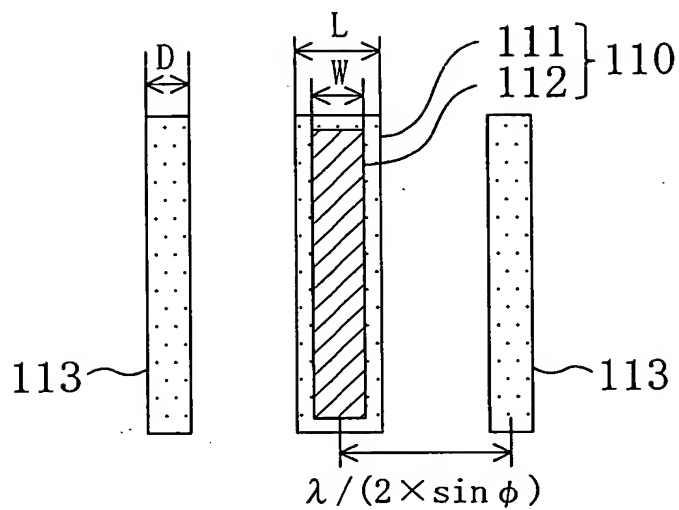


FIG. 9B

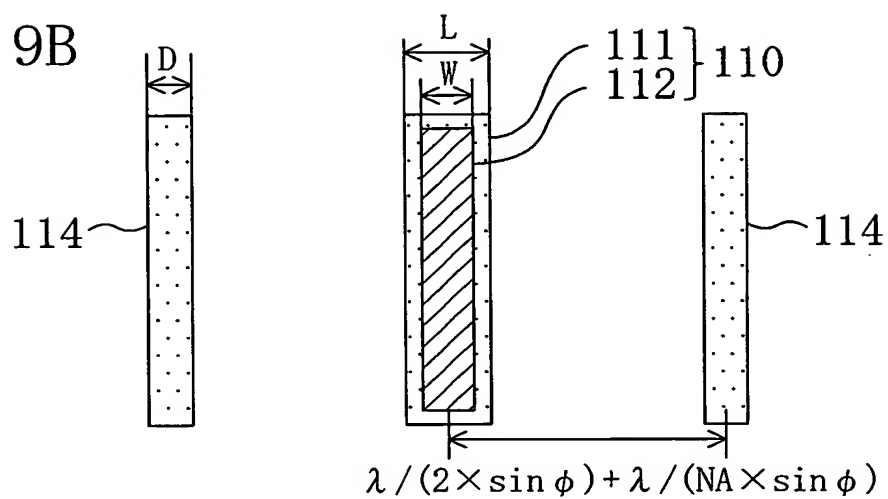


FIG. 9C

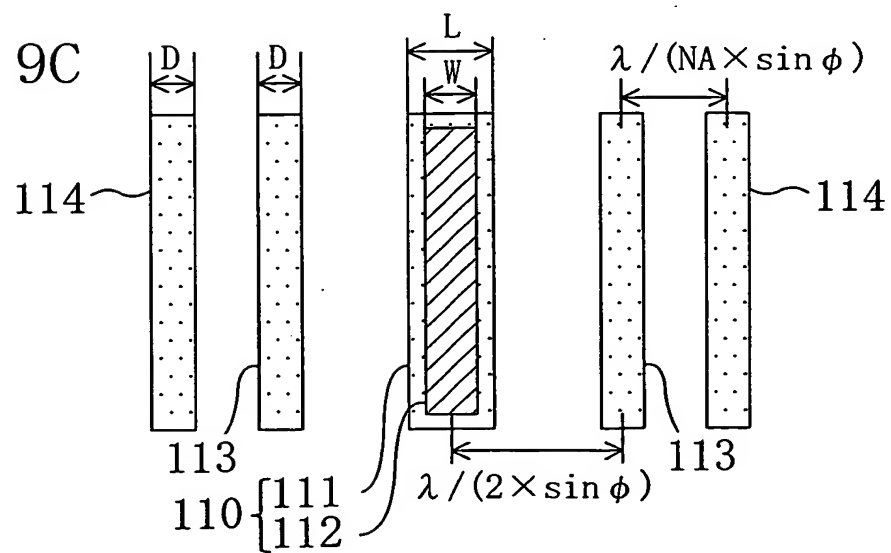


FIG. 10A

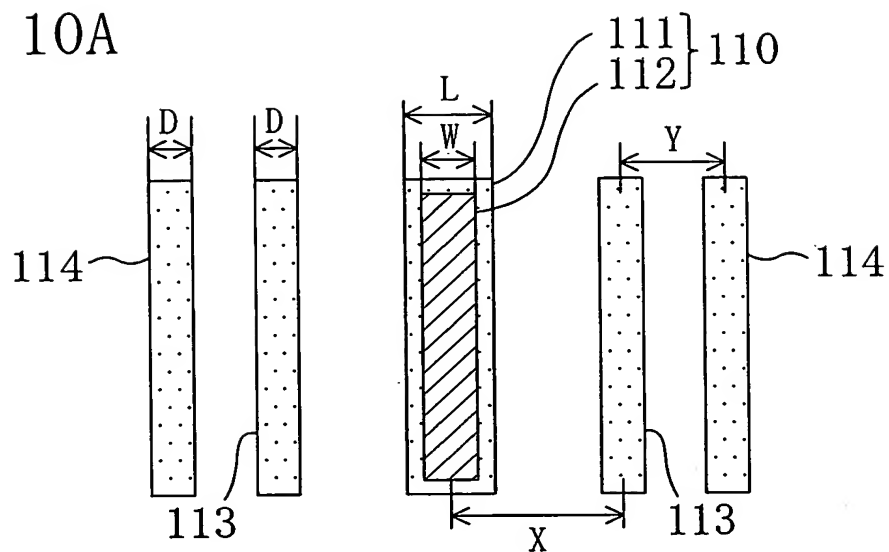


FIG. 10B

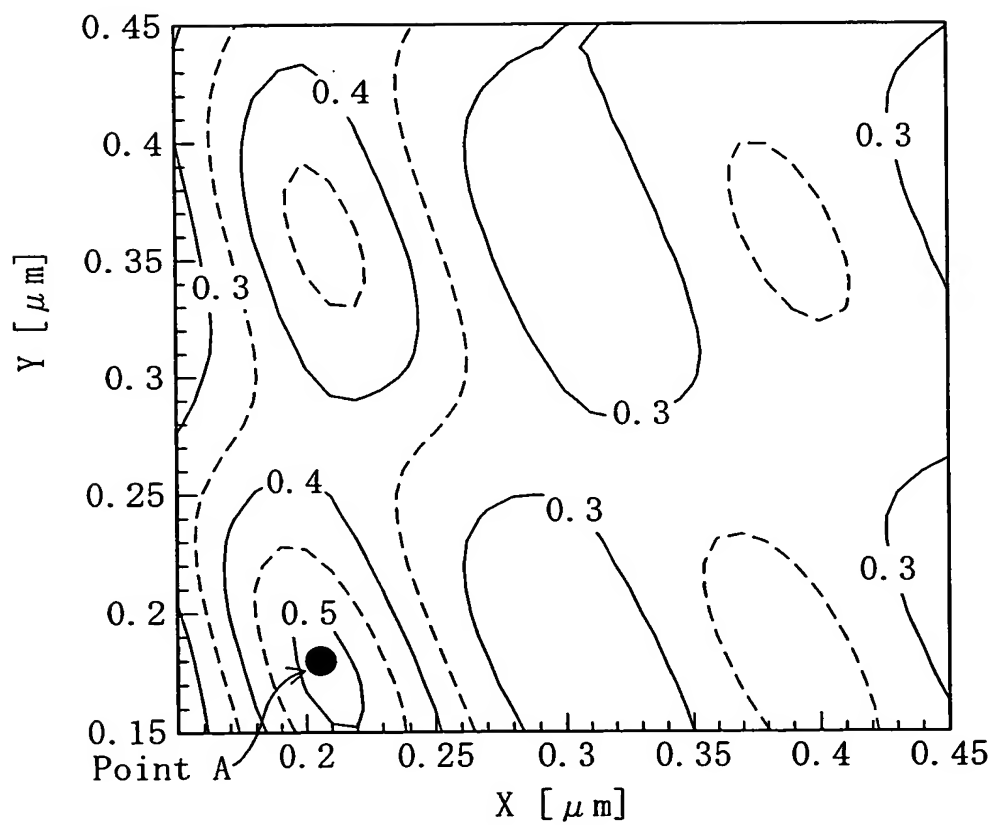


FIG. 11A

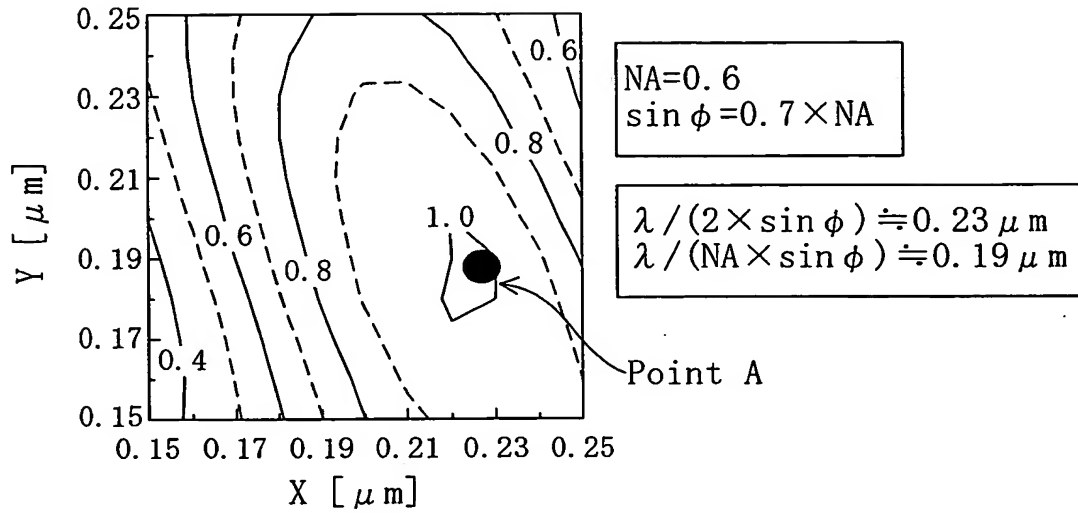


FIG. 11B

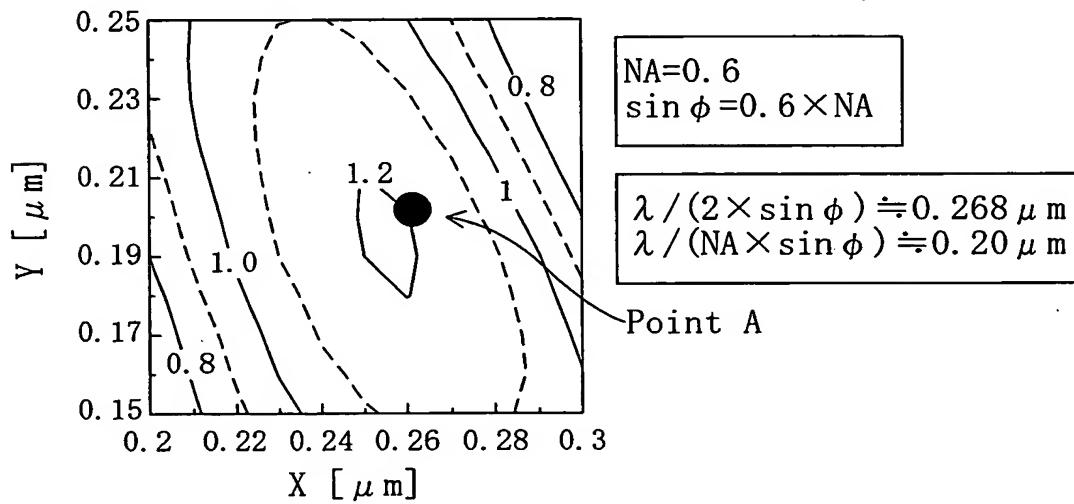


FIG. 11C

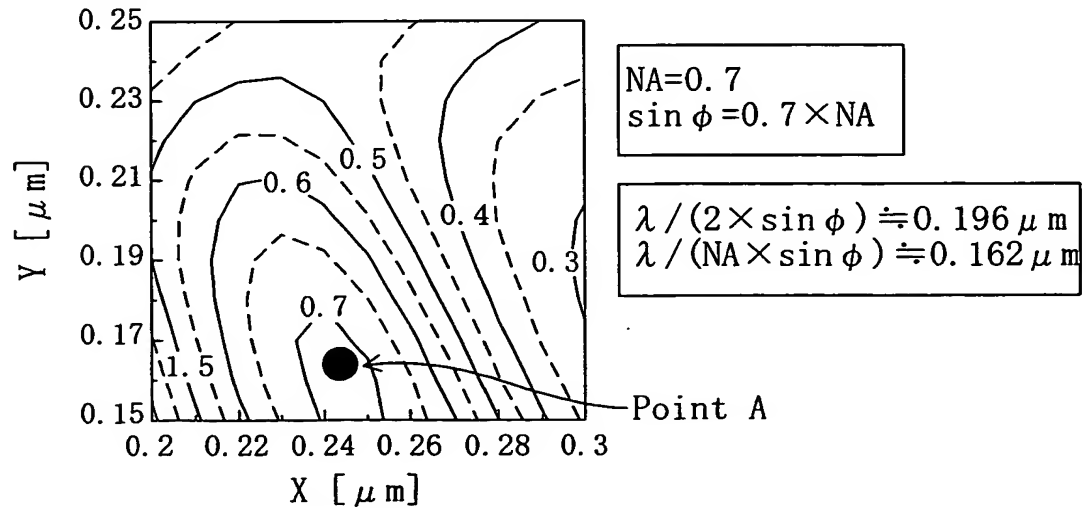


FIG. 12A

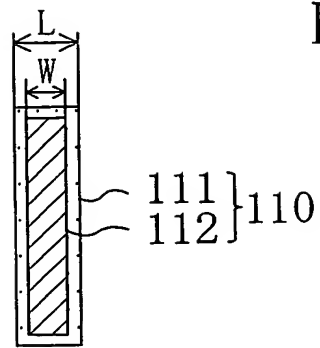


FIG. 12D

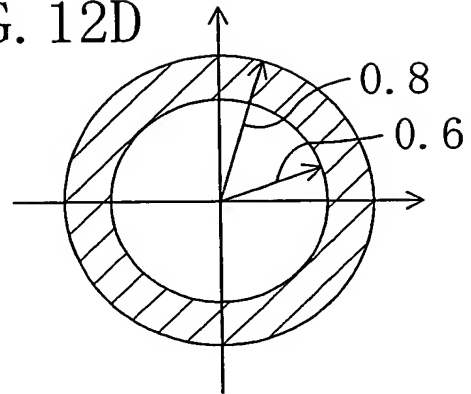


FIG. 12B

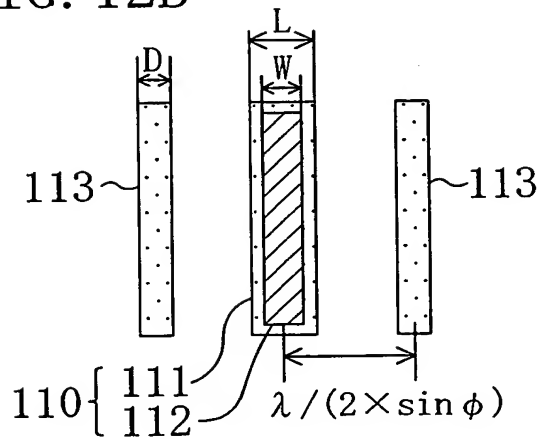


FIG. 12E

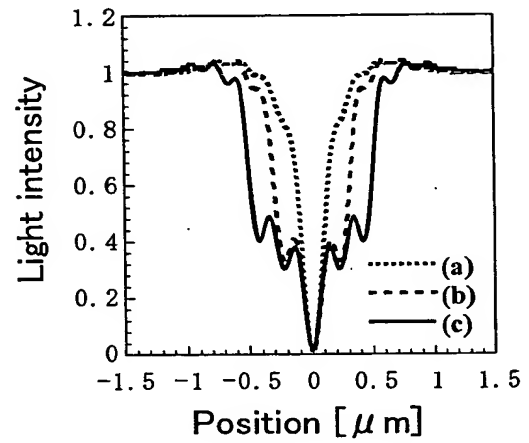


FIG. 12C

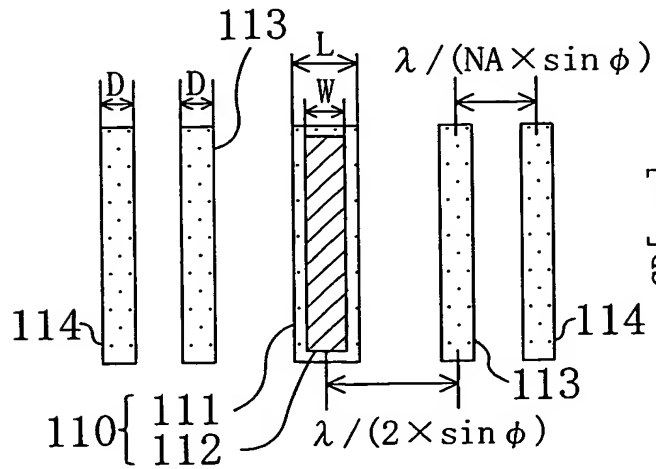


FIG. 12F

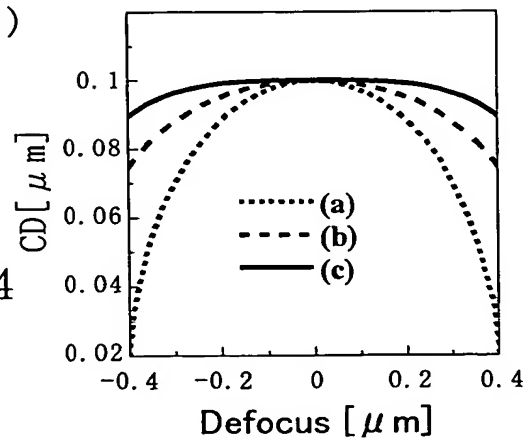


FIG. 13A

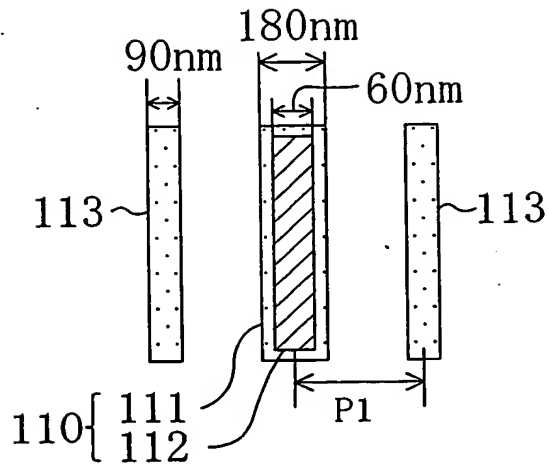


FIG. 13B

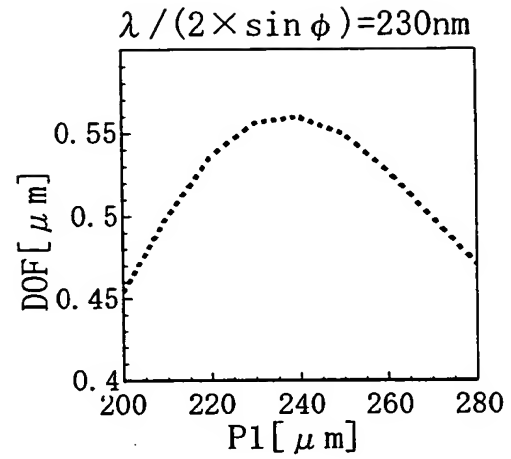


FIG. 13C

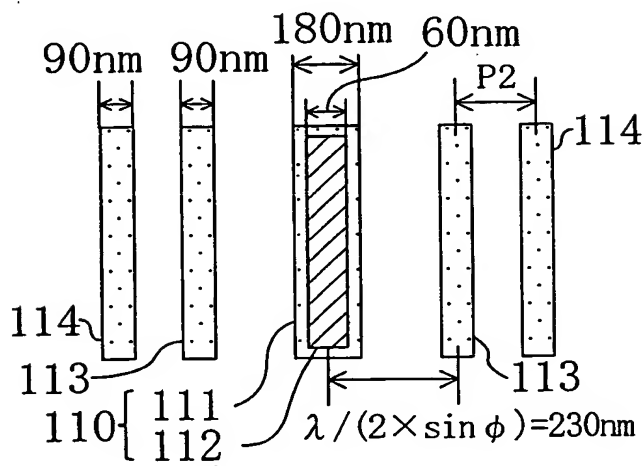


FIG. 13D

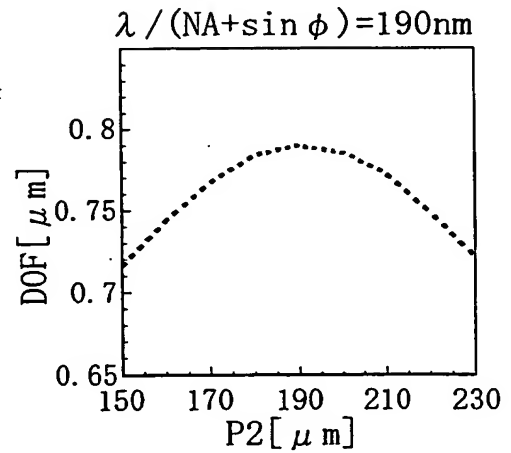


FIG. 14A

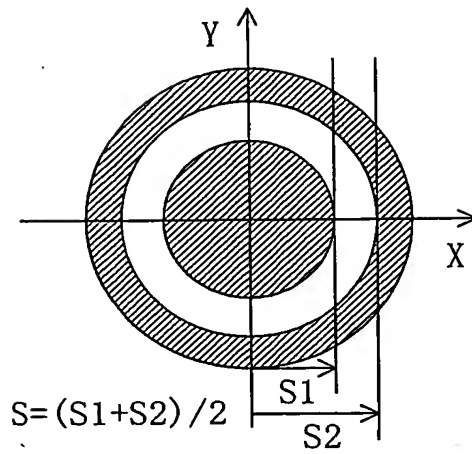


FIG. 14B

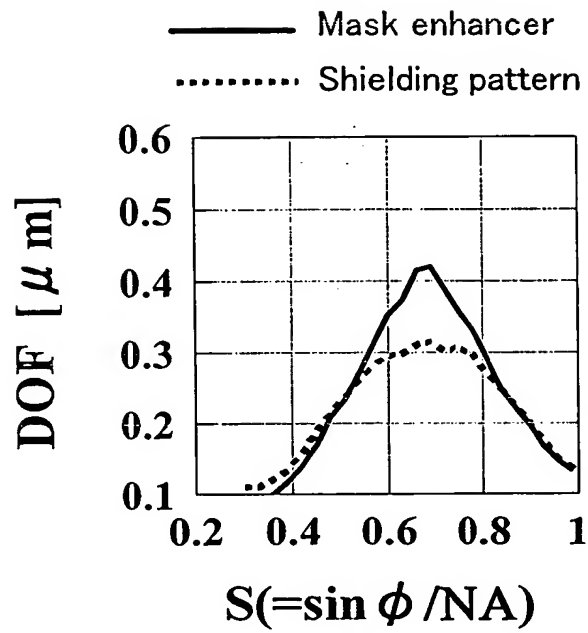


FIG. 14C

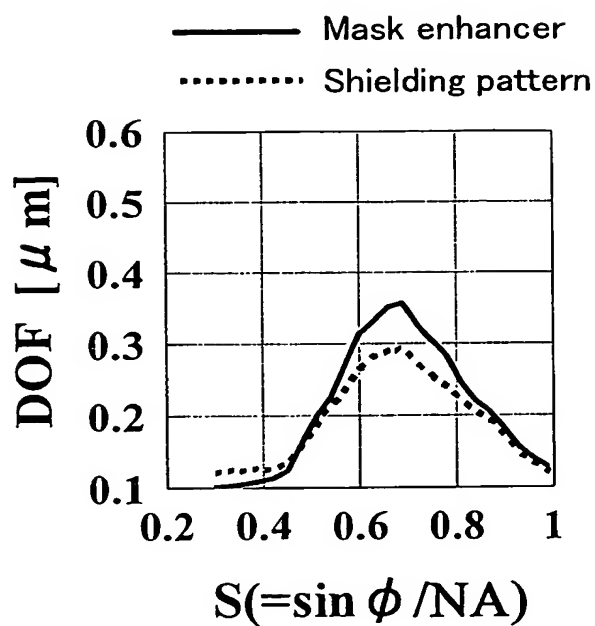


FIG. 14D

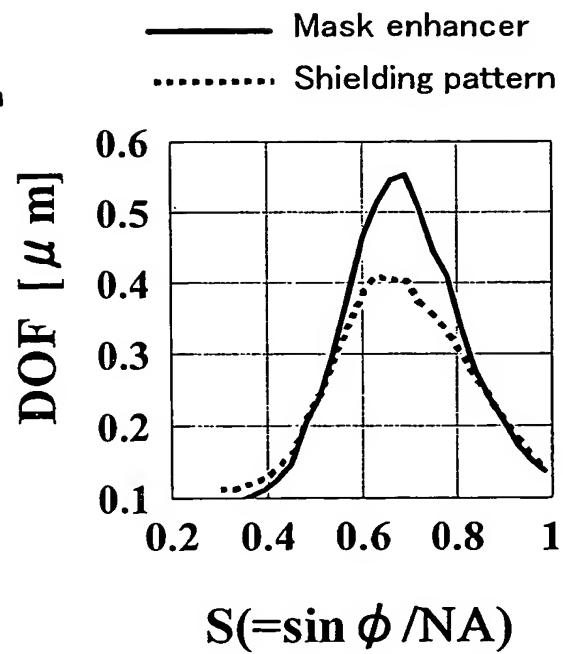


FIG. 15A

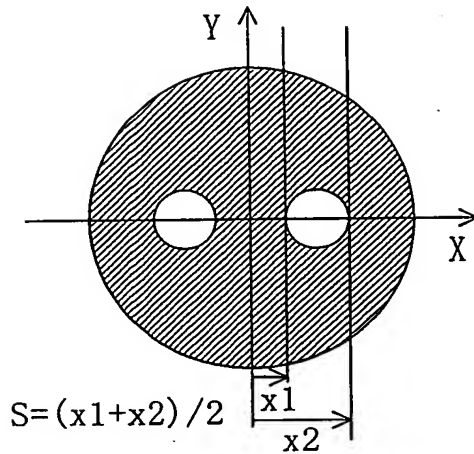


FIG. 15B

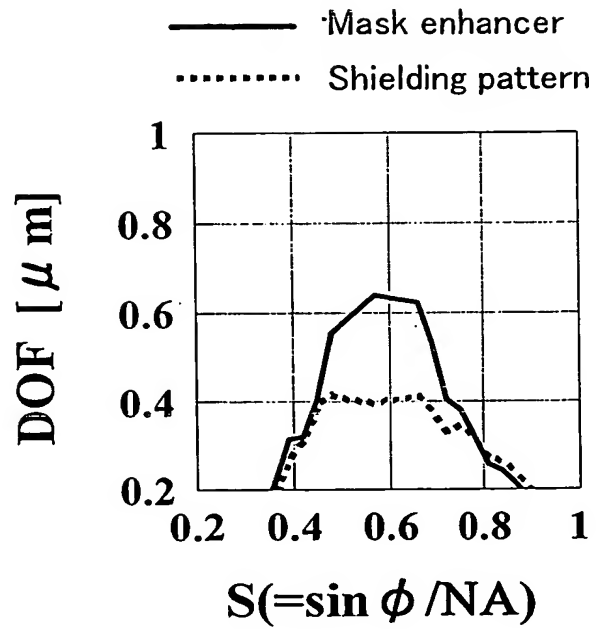


FIG. 15C

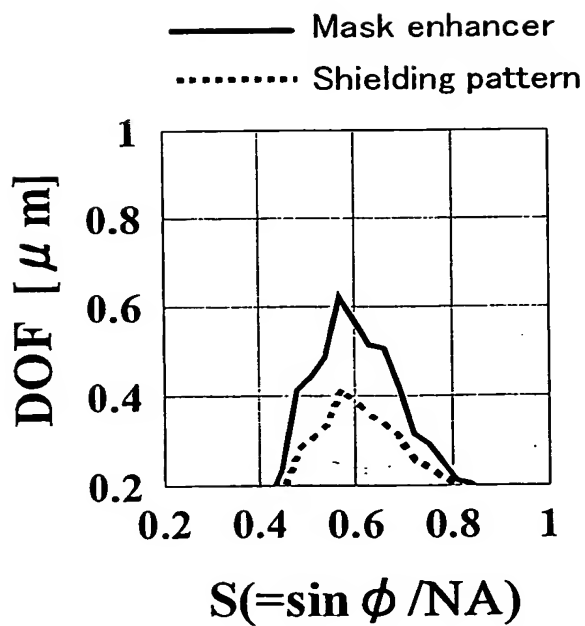


FIG. 15D

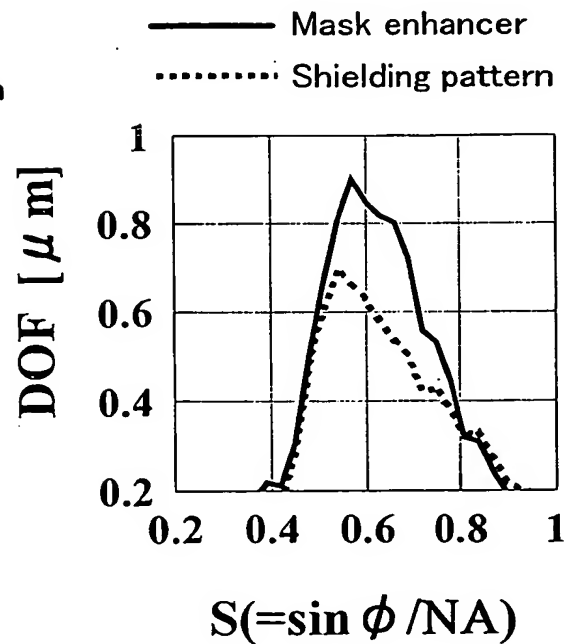


FIG. 16A

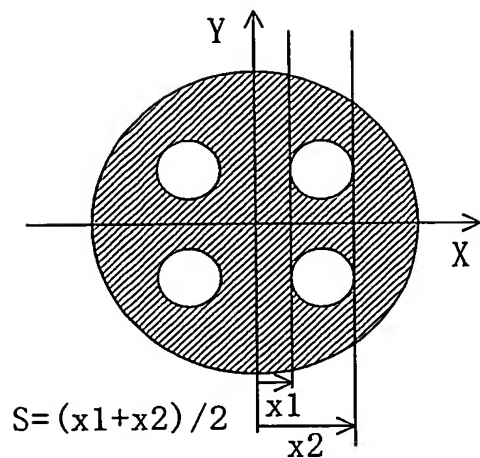


FIG. 16B

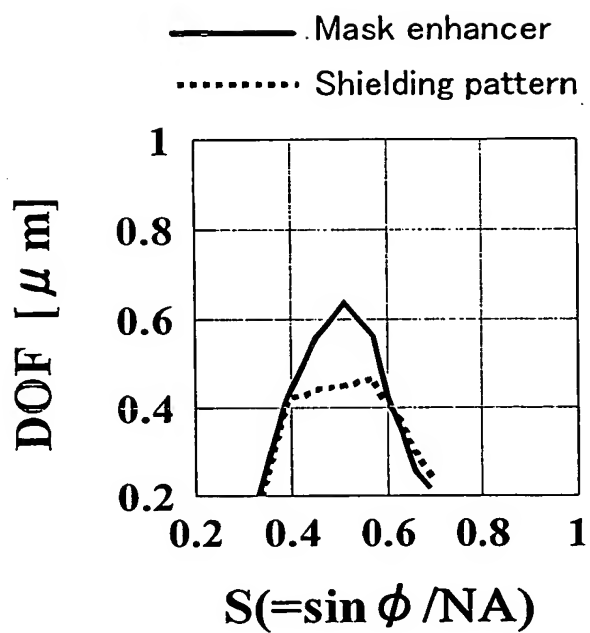


FIG. 16C

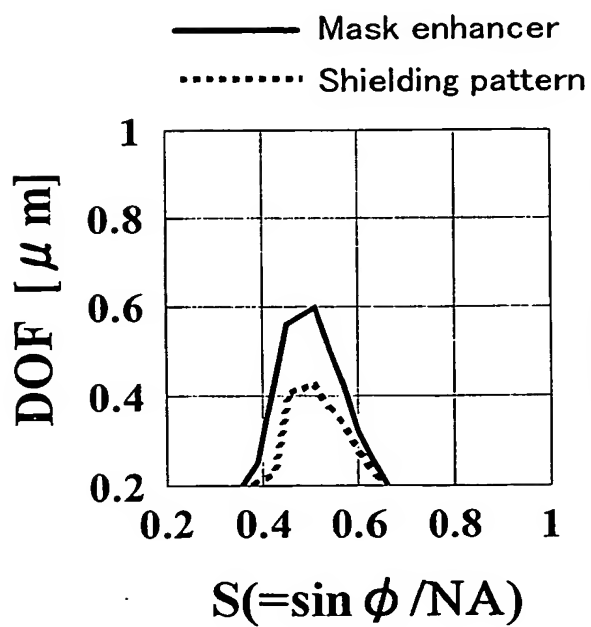


FIG. 16D

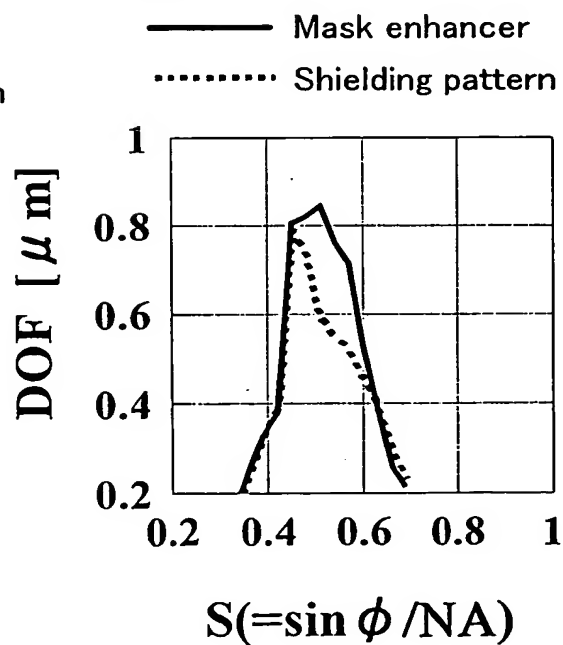




FIG. 17A

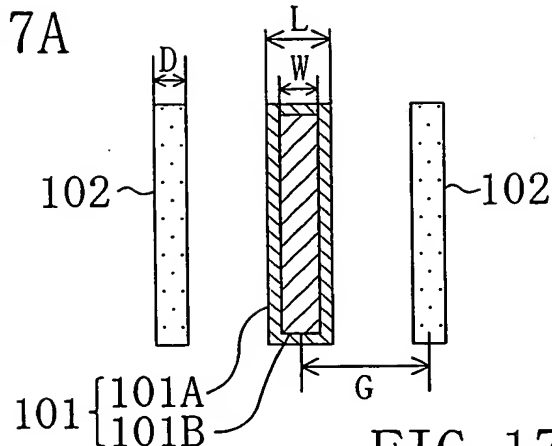


FIG. 17B

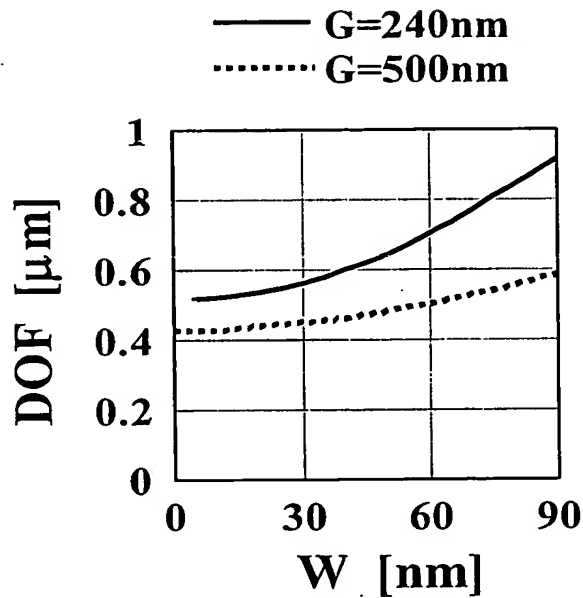


FIG. 17C

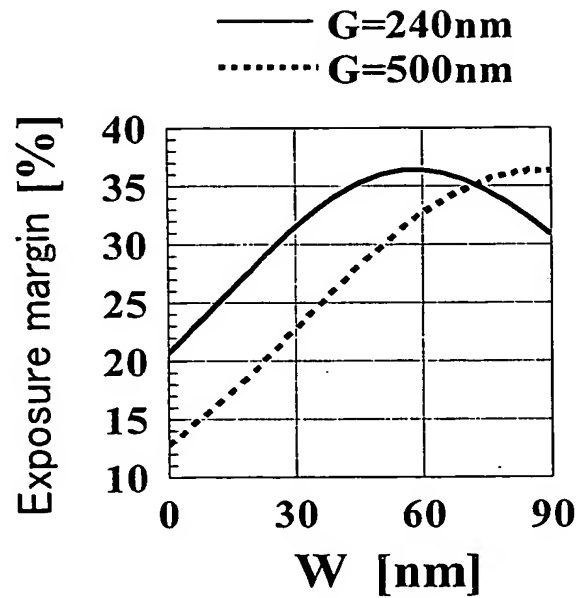


FIG. 17D

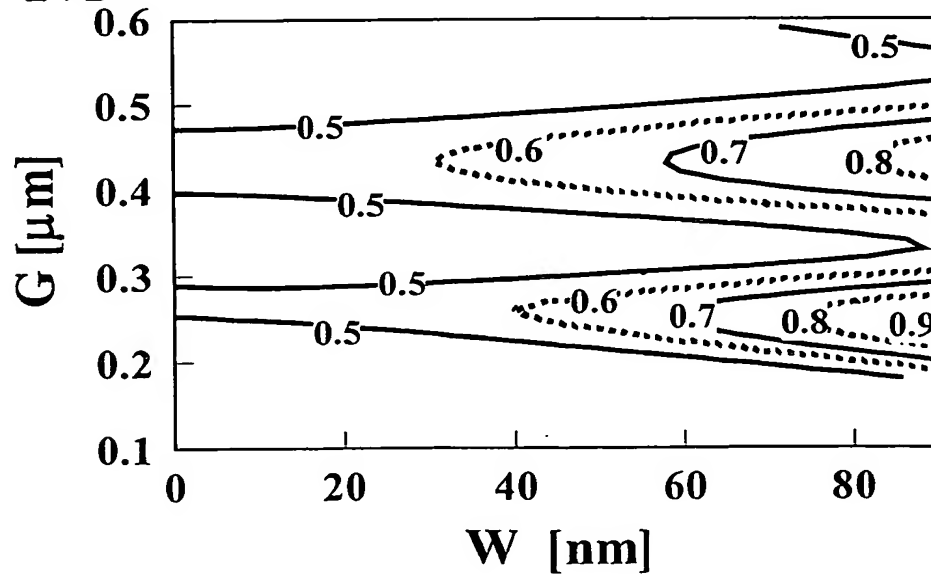


FIG. 18A

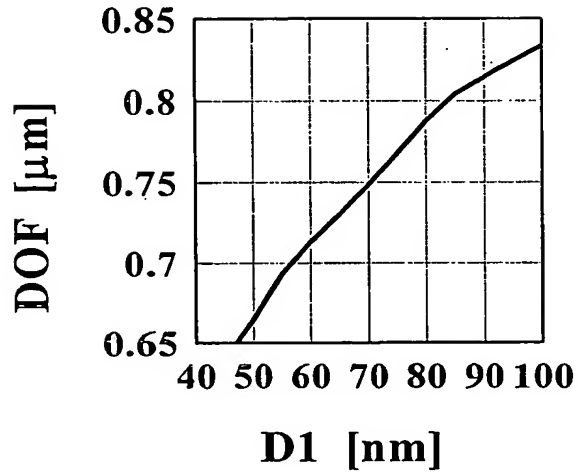


FIG. 18B

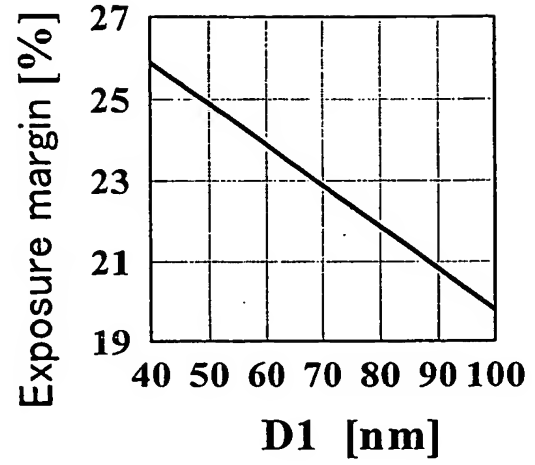


FIG. 18C

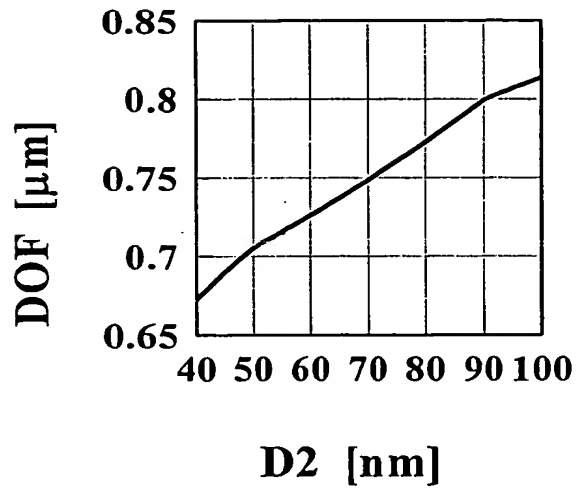


FIG. 18D

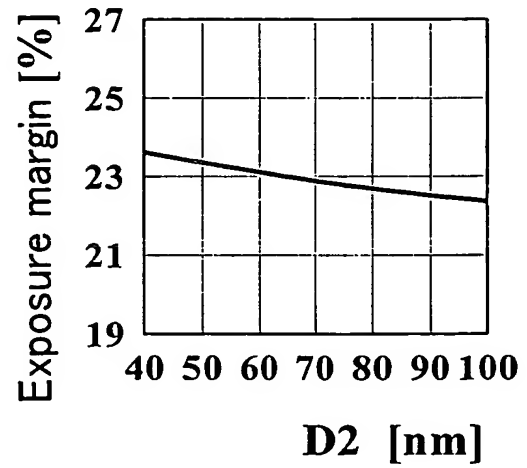


FIG. 19

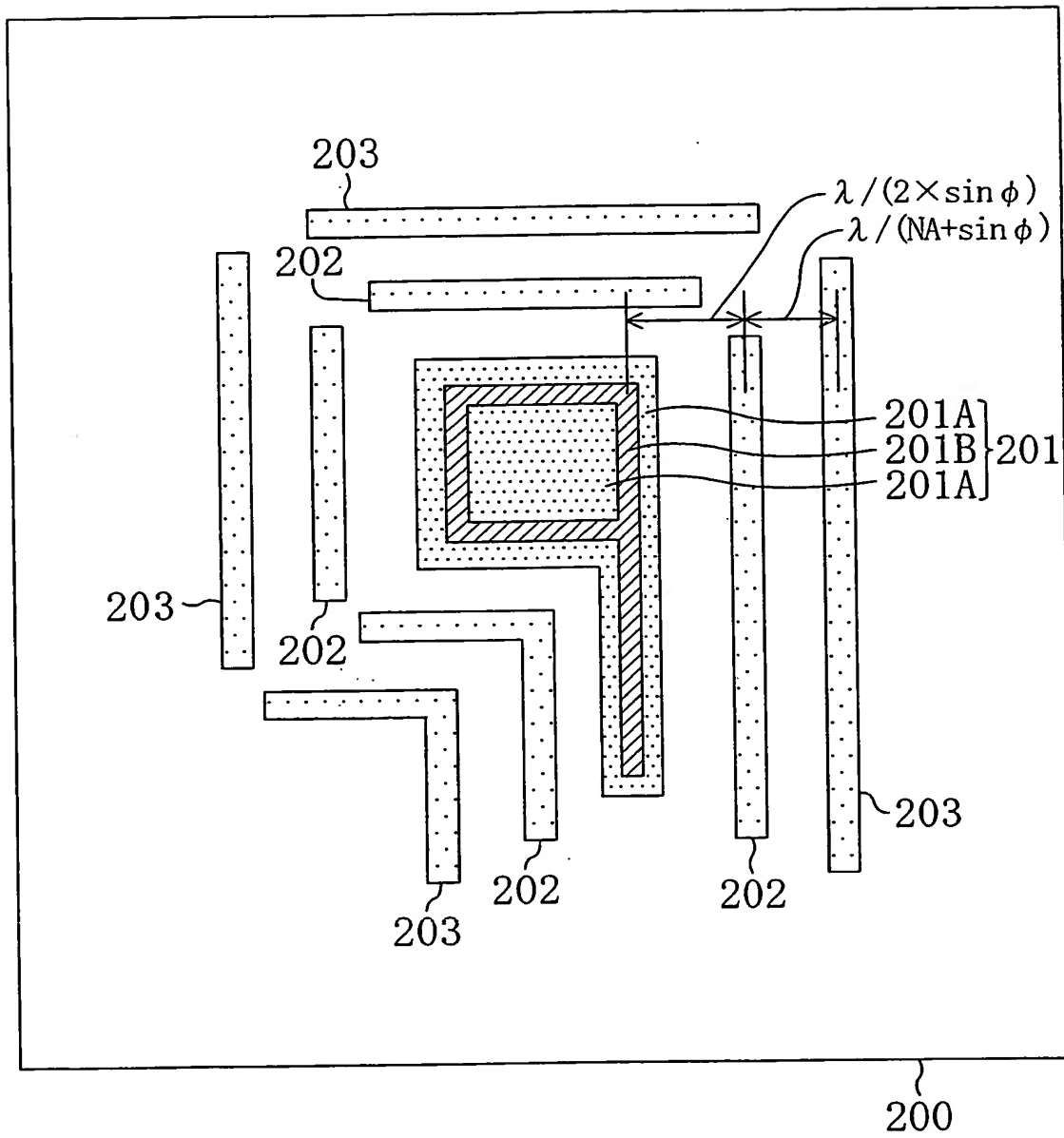


FIG. 20A

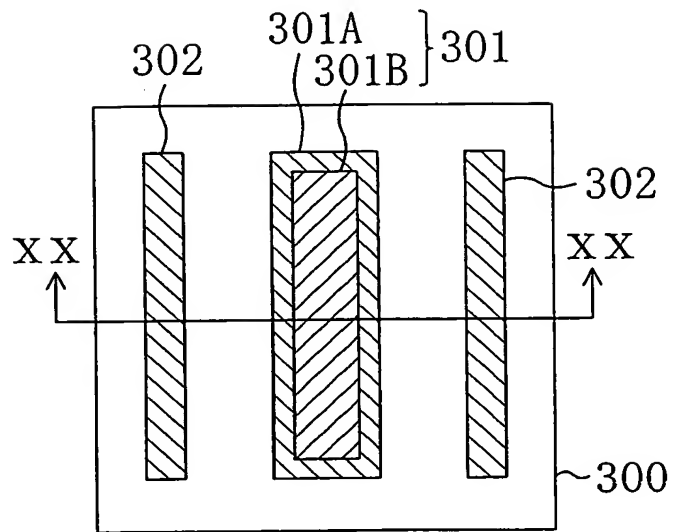


FIG. 20B

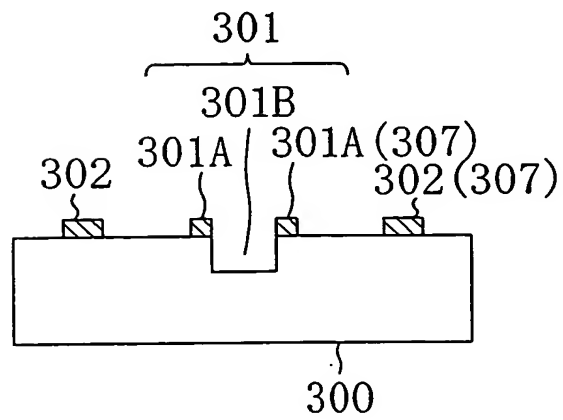


FIG. 21A

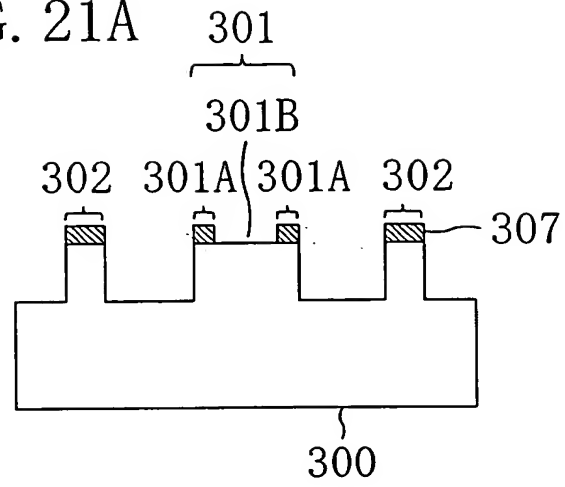


FIG. 21B

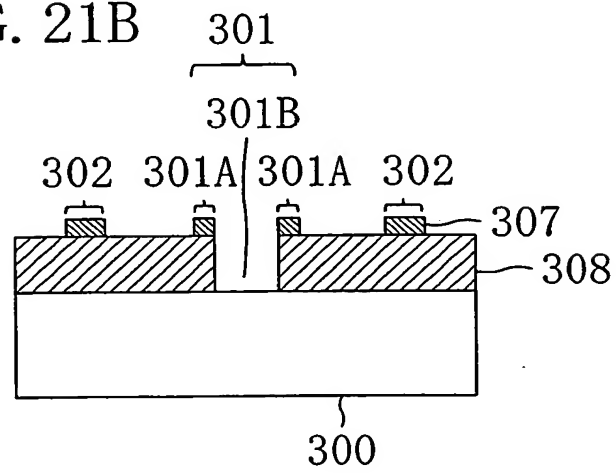


FIG. 21C

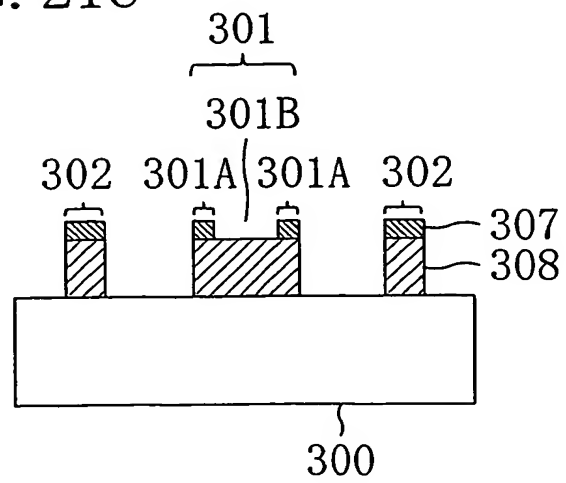


FIG. 22

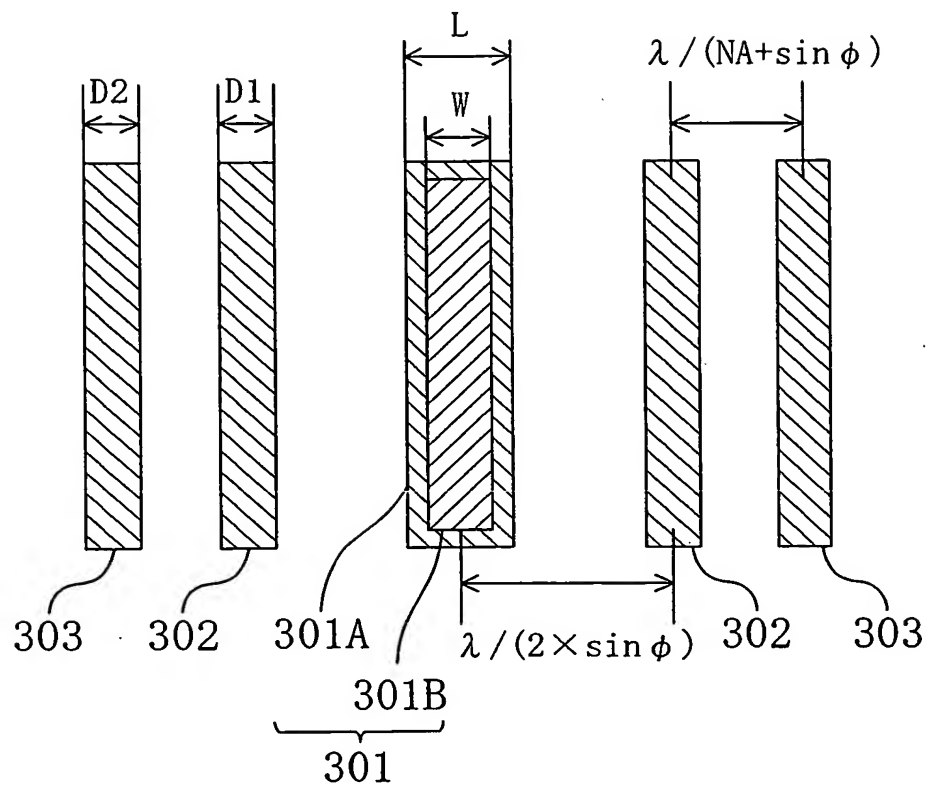


FIG. 23A

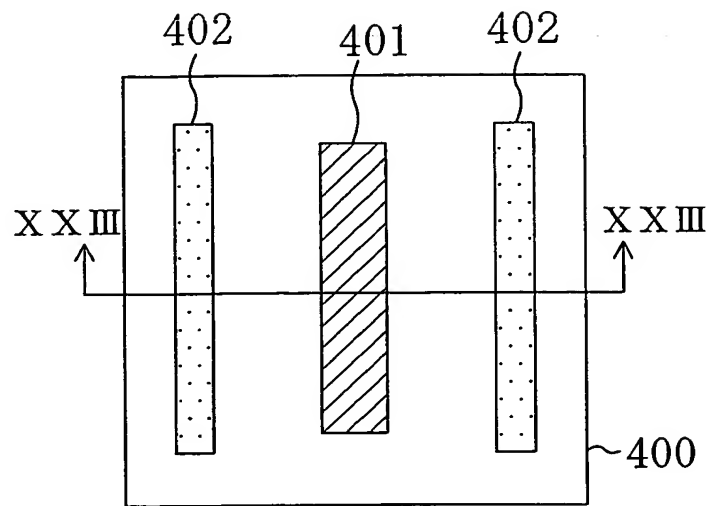


FIG. 23B

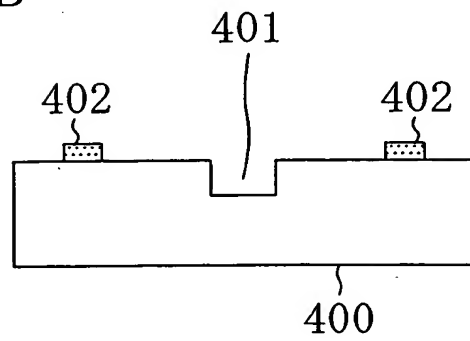


FIG. 23C

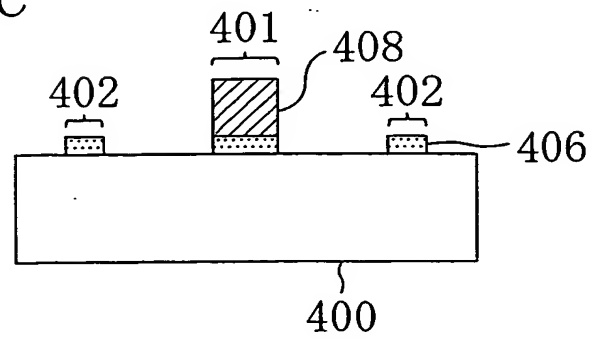


FIG. 24

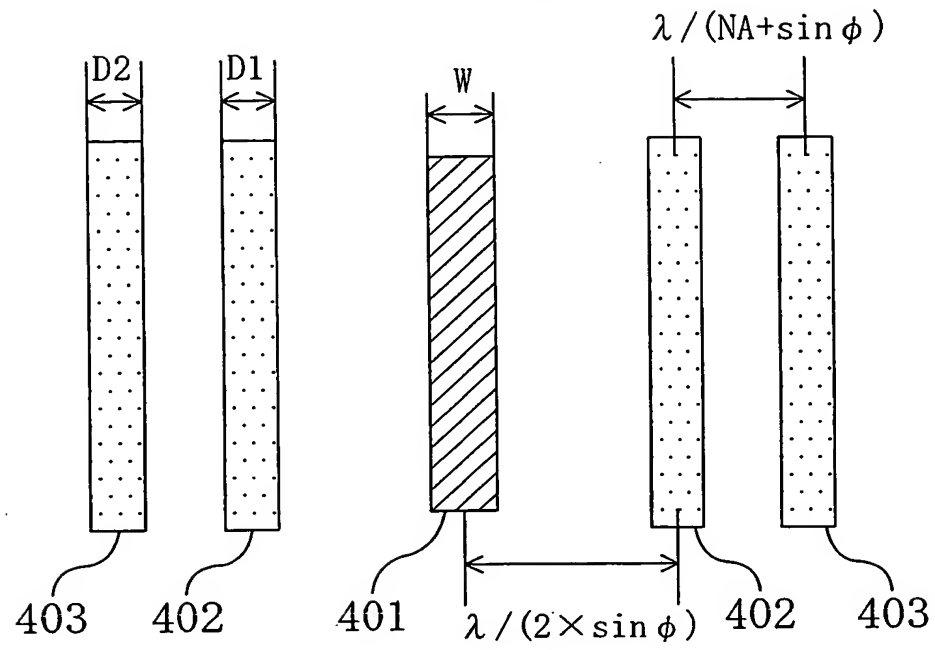




FIG. 25A

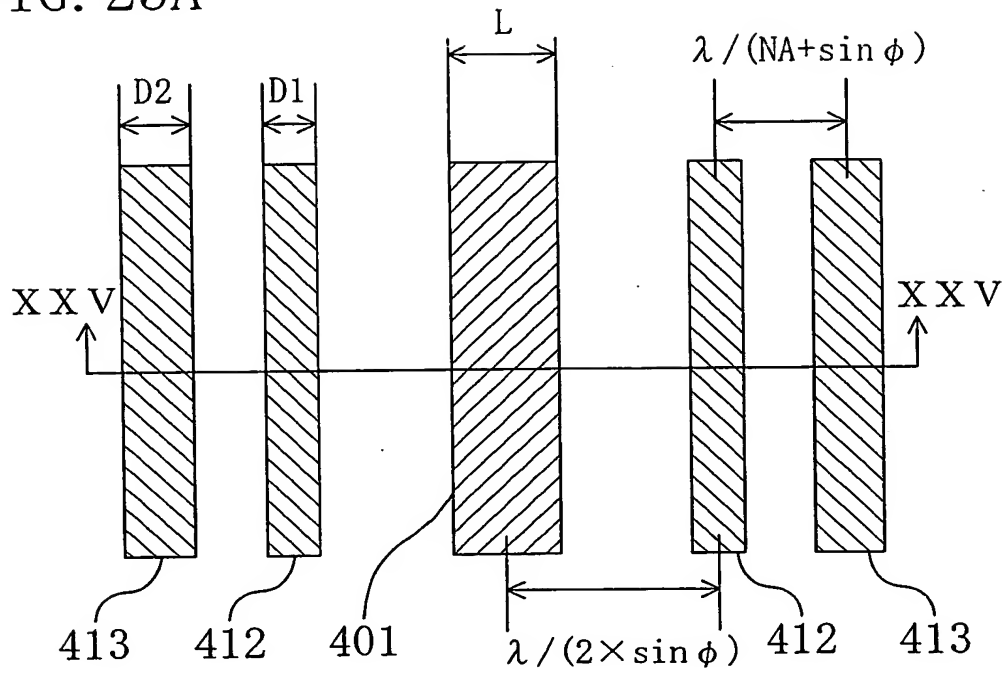


FIG. 25B

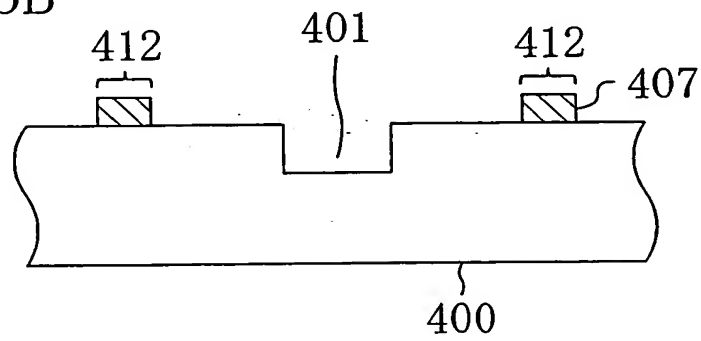


FIG. 25C

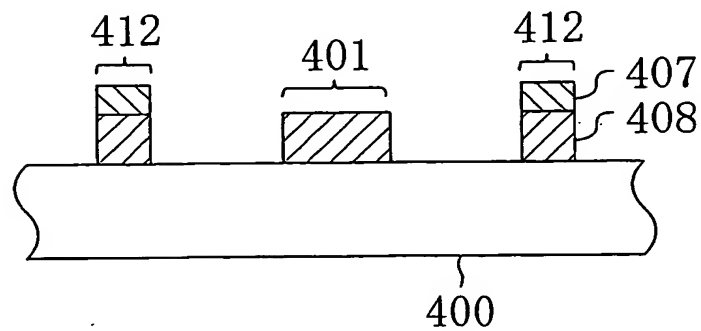


FIG. 26

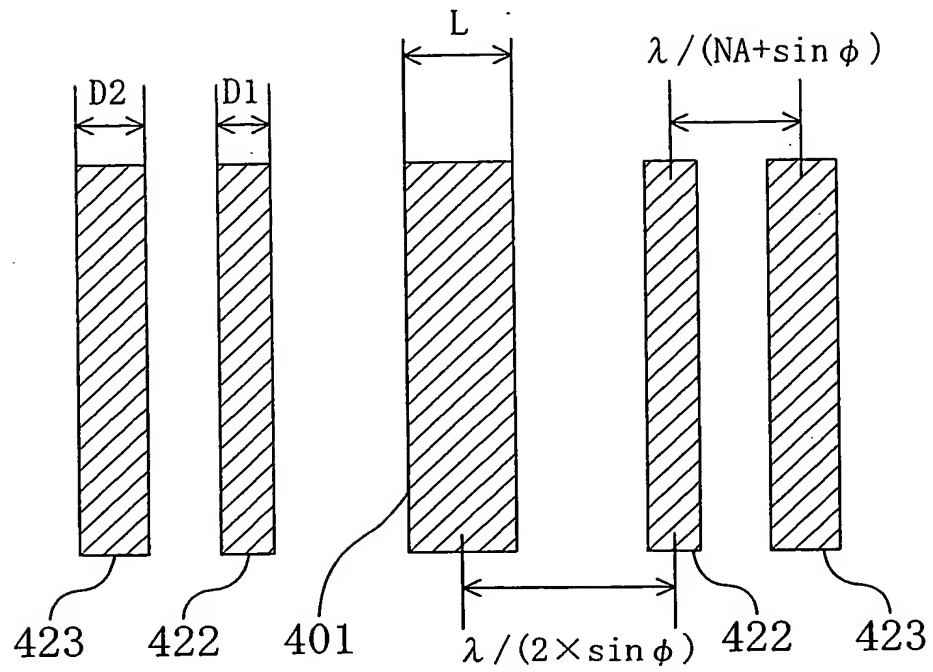
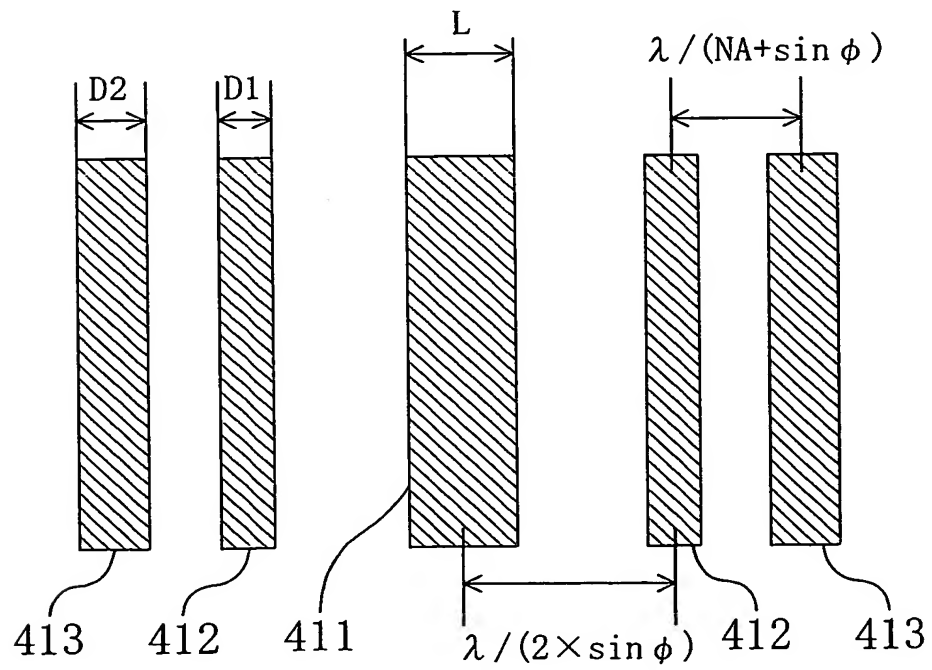


FIG. 27



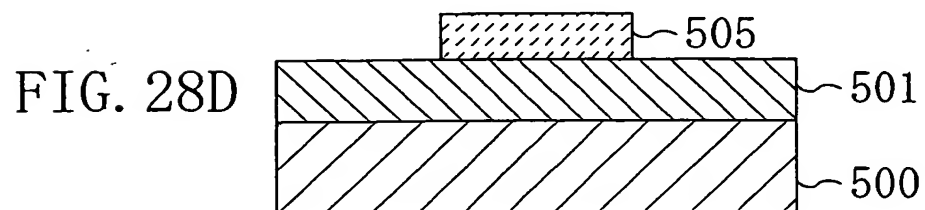
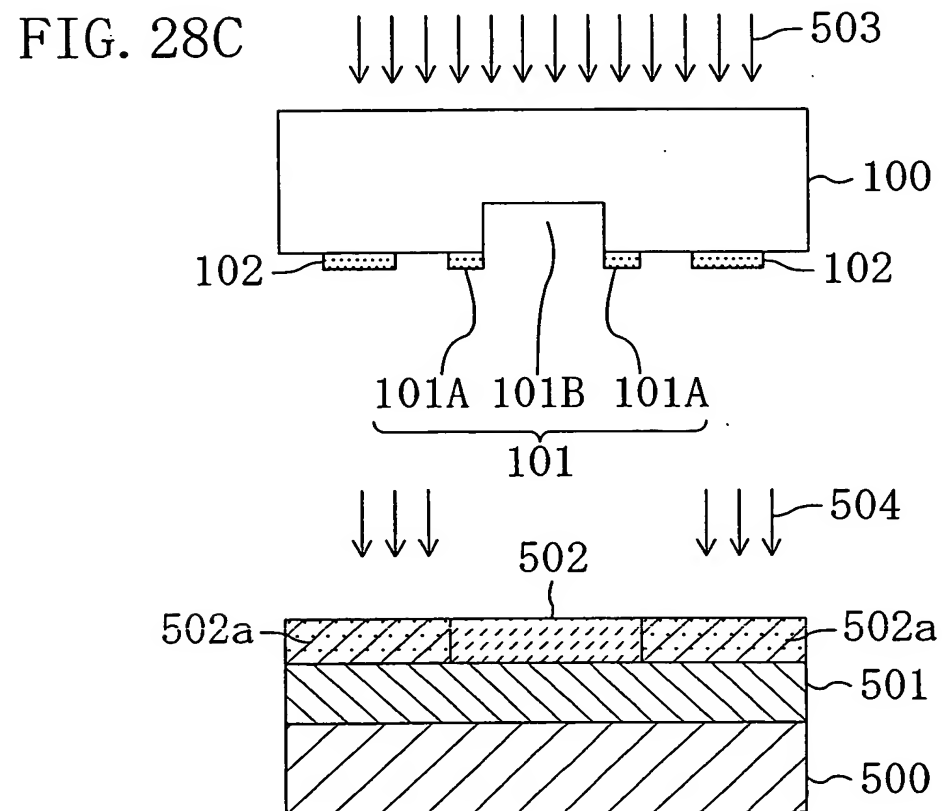
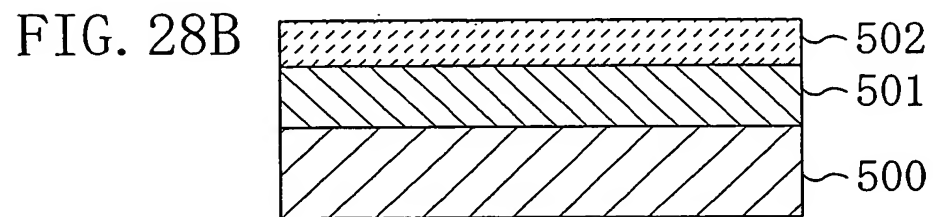
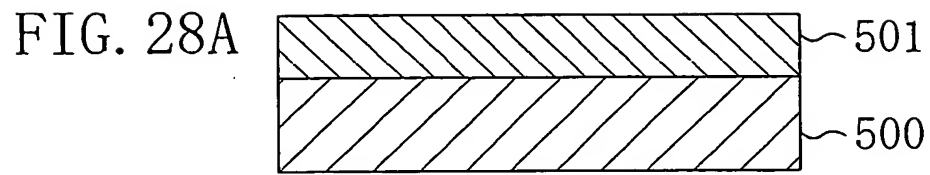
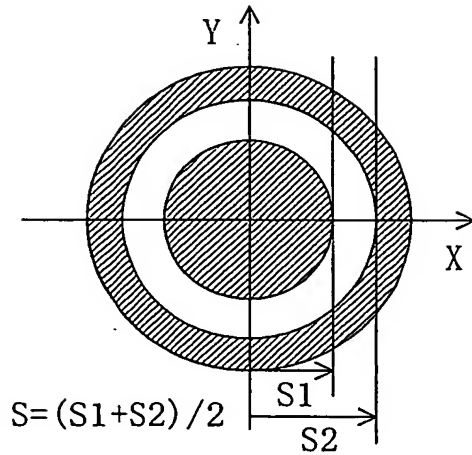
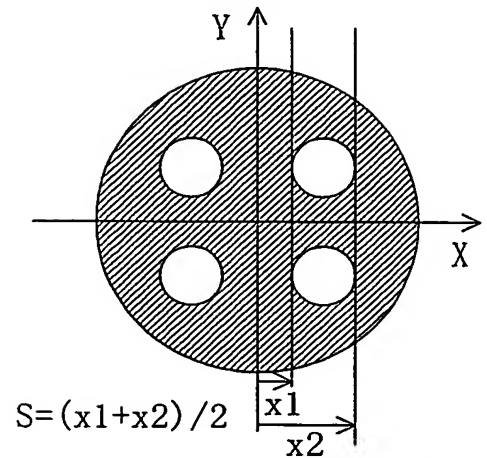


FIG. 29A



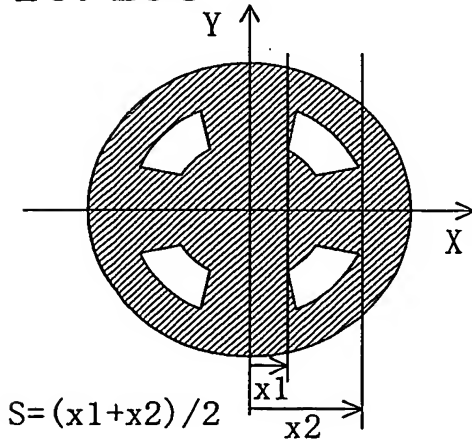
Annular  
illumination

FIG. 29B



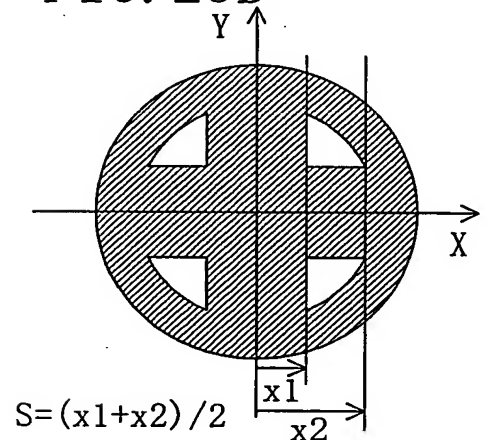
Four-eyed illumination  
(Quadrupole illumination)

FIG. 29C



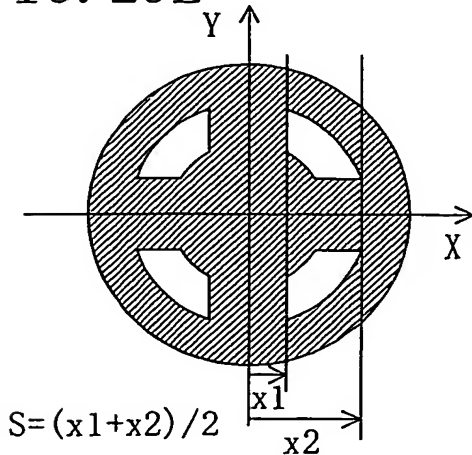
Four-eyed illumination  
(Quadrupole illumination)

FIG. 29D



Four-eyed illumination  
(Quadrupole illumination)

FIG. 29E



Four-eyed illumination  
(Quadrupole illumination)

FIG. 30

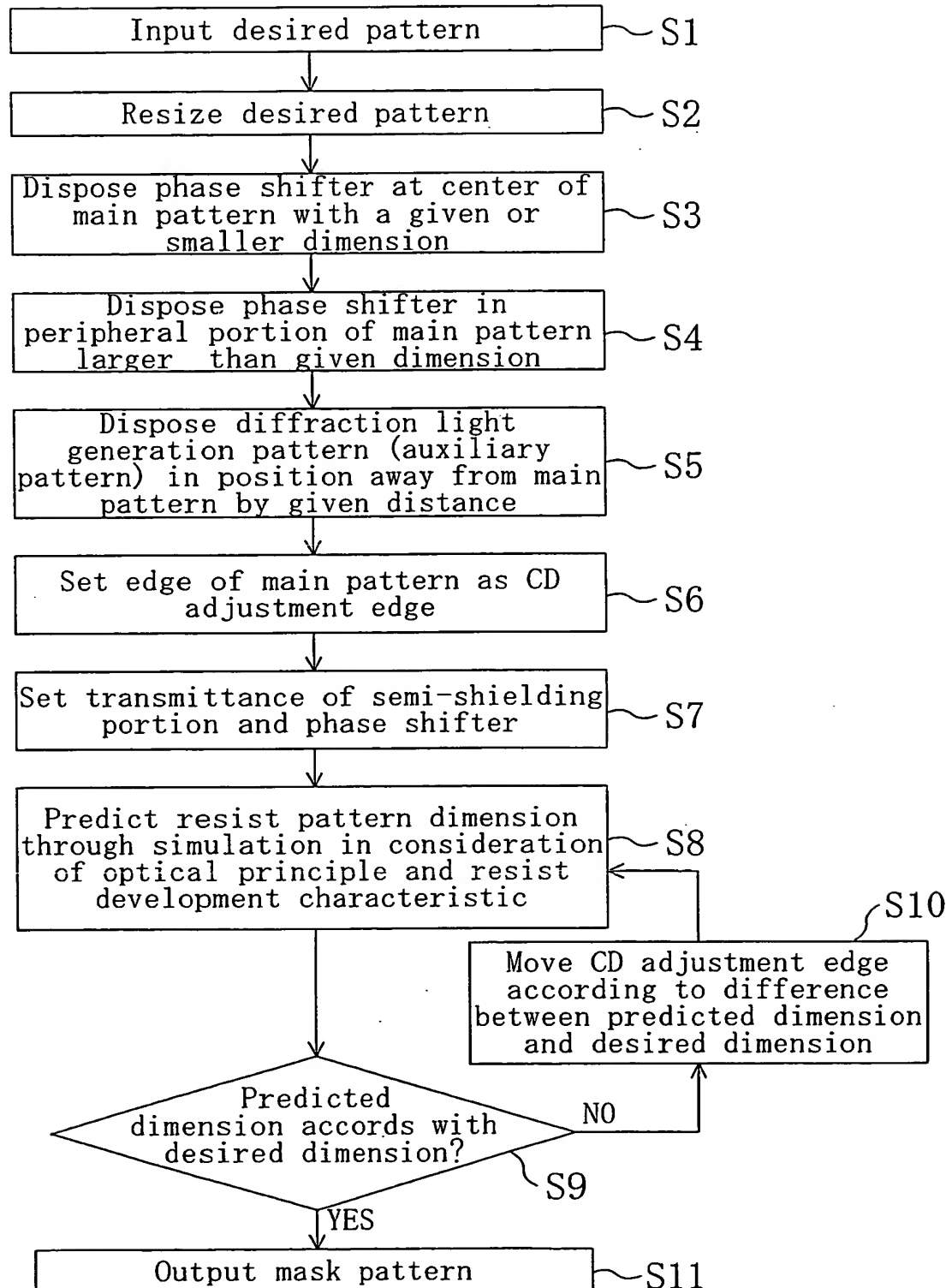


FIG. 31A

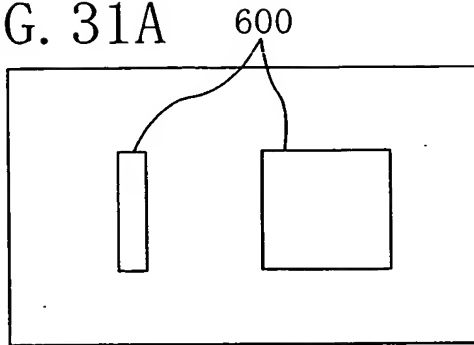


FIG. 31B

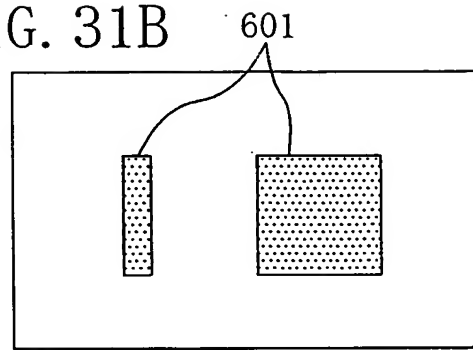


FIG. 31C

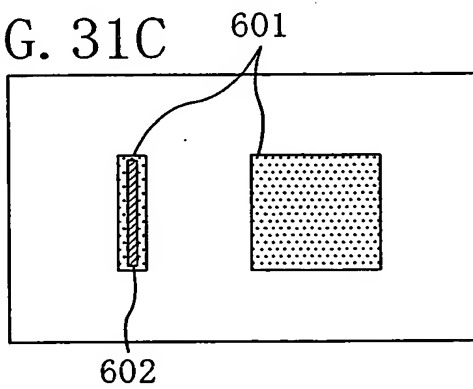


FIG. 31D

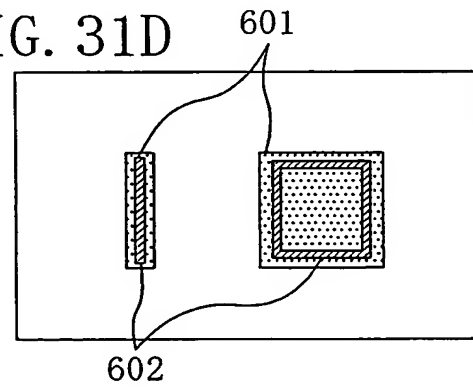


FIG. 31E

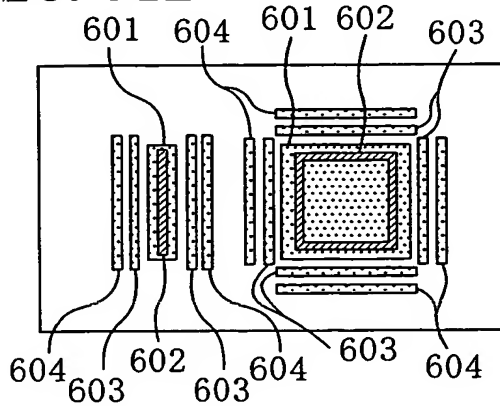


FIG. 31F

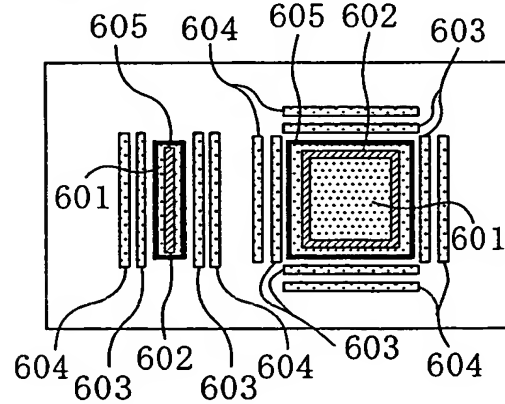
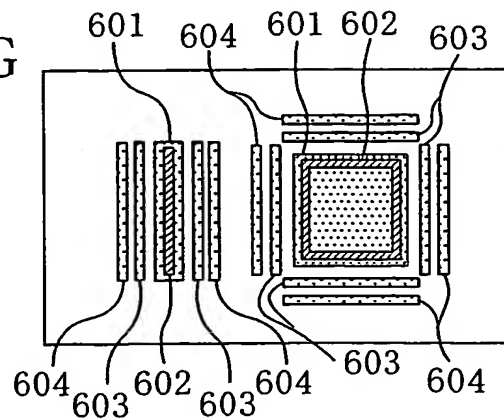


FIG. 31G



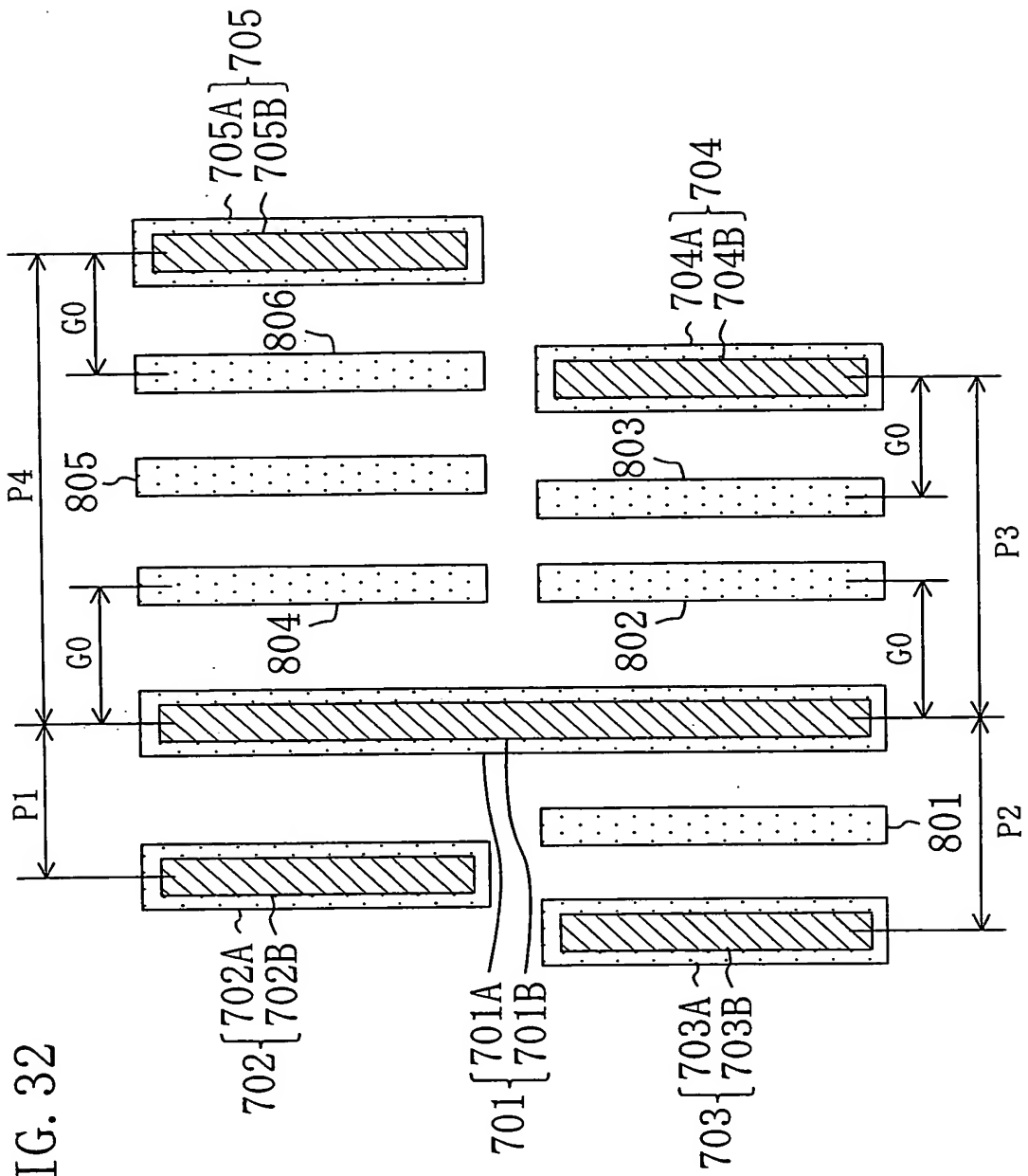


FIG. 32

FIG. 33

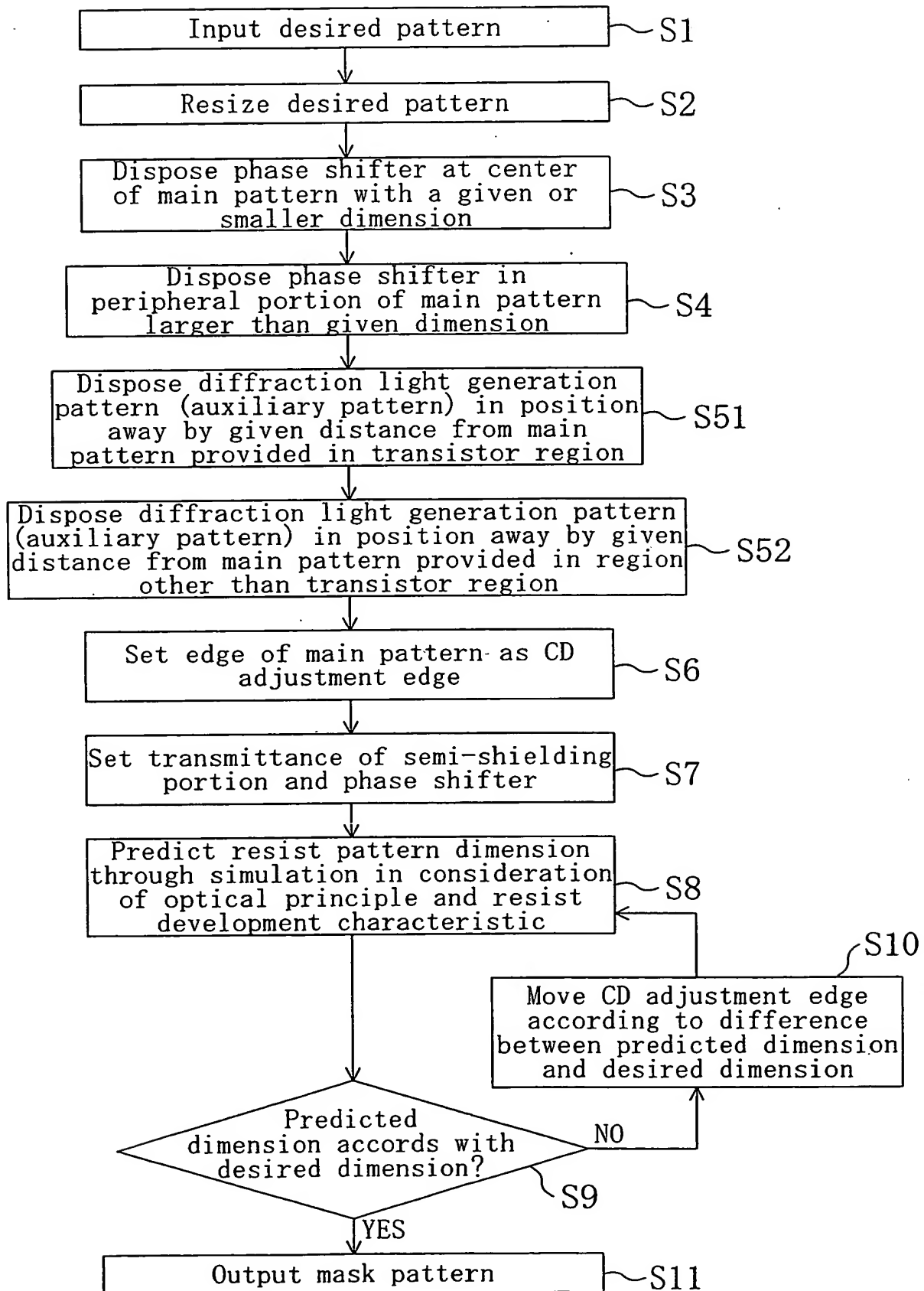




FIG. 34

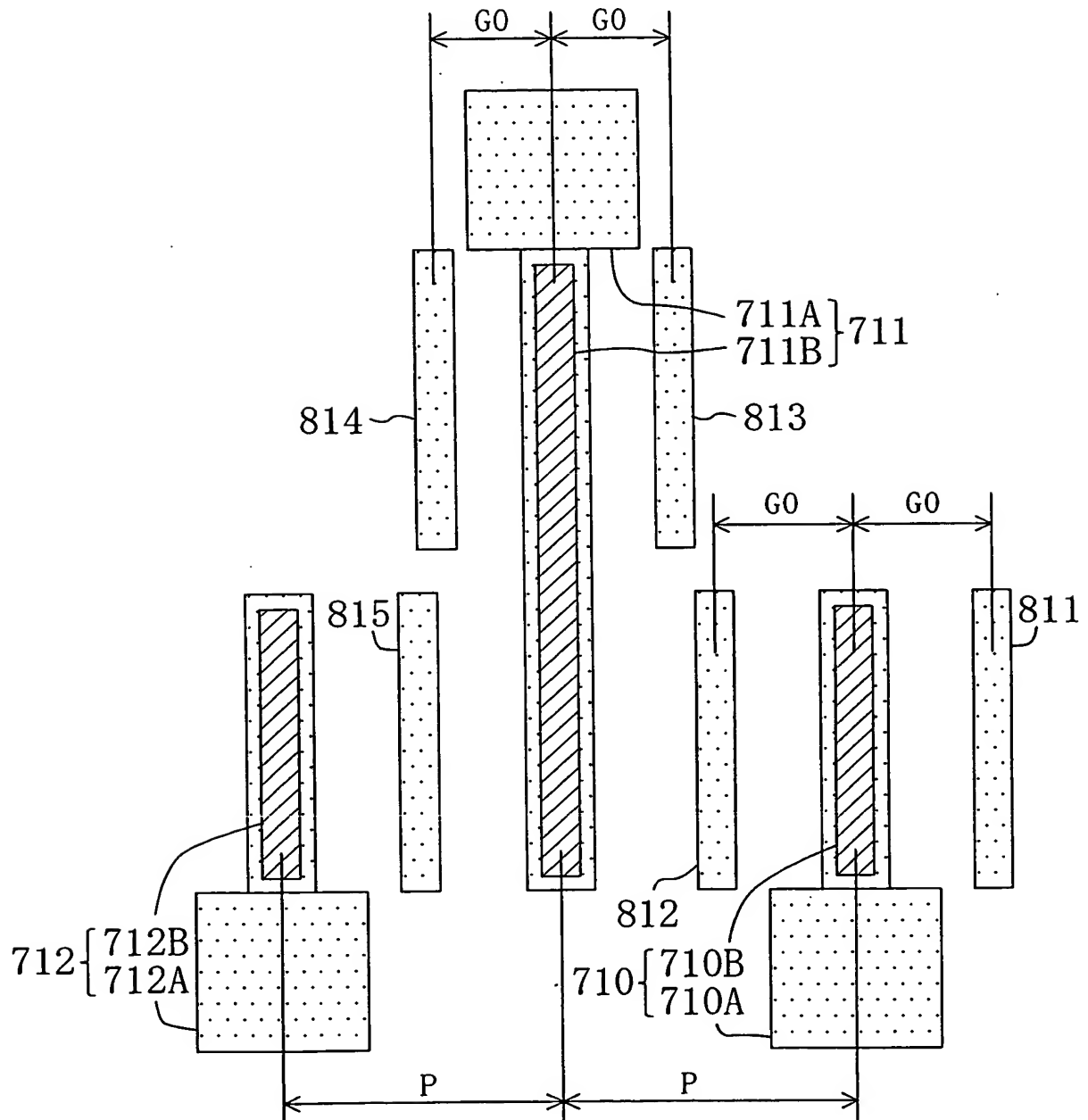


FIG. 35  
PRIOR ART

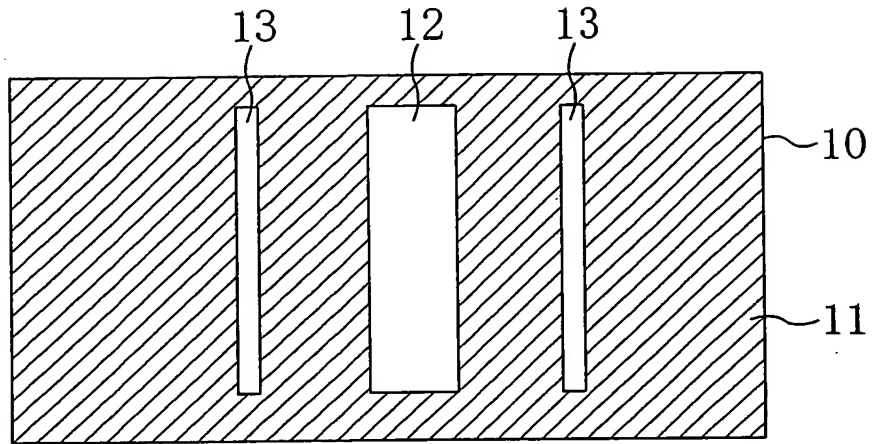


FIG. 36  
PRIOR ART

